Infinity Installation and Upgrade Guide

Contents

Installation Overview

This guide provides instructions about how to install Blackbaud programs with the Blackbaud Installer. With the installer, you can install your programs in a single installation. Prior to the installer, each program required a separate installation. For users with Blackbaud programs already in place, the first upgrade with the Blackbaud Installer requires several steps before you install or update programs.

For information about new features in your Blackbaud programs, please see the *New Features Guide* for each program. These guides describe new features in the programs and any changes to existing functionality. Before you install or update your programs, we recommend you review the installation overview in this chapter and follow the links for information that applies to your organization.

While the Blackbaud Installer allows you to install the features of an integrated solution at one time, it only installs programs and features on the Infinity platform. If you have programs that are not yet on the Infinity platform, such as **The Raiser's Edge** and **The Education Edge**, you must install them separately. For information about the components that the wizard installs, see Blackbaud Program Features on page 9. Programs that use the Infinity platform include **Blackbaud CRM**, **Blackbaud Direct Marketing**, and **Blackbaud NetCommunity**.

Installation Overview

With the Blackbaud installation wizard, you can install the features for an integrated solution at one time. You do not need to complete separate installations for each program. However, the wizard only installs programs on the Infinity platform. Programs that use the Infinity platform include **Blackbaud CRM**, **Blackbaud Direct Marketing**, and **Blackbaud NetCommunity**.

You can run the installer multiple times to install features on different servers and workstations according to the configuration needs of your organization's network architecture.

The installer uses your Blackbaud account's site ID and email address to determine the programs and features that your organization can install. To request this information, contact Blackbaud at solutions@blackbaud.com or 800-443-9441.

The steps in the installation process depend on the programs and features that you have. This section provides an overview of the installation process, along with cross references to additional information about each step.

Step 1

To ensure the installation of your Blackbaud programs goes smoothly, review the installation considerations for the programs you will install. The considerations describe important tasks that the

installer does not handle and that you must perform as part of the installation process. For information about installation considerations, see Upgrade Paths on page 10.

Note: Before you install any programs, we strongly recommend that you familiarize yourself with the system requirements for each program. You can access system requirements on the Blackbaud website at http://www.blackbaud.com/products/system/requirements.aspx .

Step 2

Before you install or upgrade, back up any existing databases for Blackbaud programs.

Step 3

When you install or update your Blackbaud programs, the steps to follow depend on the programs you have and whether you need to update the programs or install them for the first time. To ensure you follow the necessary steps to complete the installation for your programs and features, refer to the upgrade path that corresponds to your programs.

- The Raiser's Edge, Blackbaud NetCommunity, and Direct Marketing on page 11
- Blackbaud CRM and Blackbaud Internet Solutions on page 13
- NetCommunity and ResearchPoint on page 14
- Direct Marketing and ResearchPoint on page 14
- Direct Marketing, Blackbaud NetCommunity, and ResearchPoint on page 15

Step 4

After you complete the pre-installation tasks required for your upgrade path, you can begin the installation. With the Blackbaud Installer, you can install all features for your integrated solution at one time and do not need to complete separate installations for each program. You can also run the installation wizard multiple times to install features on servers and workstations according to the configuration needs of your organization's network architecture. For information about how to use the installation wizard, see Install Blackbaud Infinity Features on page 23.

Note: If the installation takes longer than four hours to complete, contact Blackbaud Support.

Note: The installation wizard installs only Blackbaud programs and features on the Infinity platform. You must install programs that are not yet on the Infinity platform separately. For information about how to install non-Infinity programs such as *The Raiser's Edge* and *The Education Edge*, see the installation guides for the individual programs. To access the guides on the Blackbaud website, go to www.blackbaud.com and click **Support**, **User Guides**.

Step 5

If you have *The Raiser's Edge* or *The Education Edge*, after you install *Blackbaud NetCommunity*, you can use the plug-in installation wizard to install the NetCommunity plug-in on workstations that access *The Raiser's Edge* or *The Education Edge*.

For information about how to install the plug-in, see Install the NetCommunity Plug-in on page 42.

Step 6

After you complete the installation process, you can perform steps to ensure the installation was successful. Some Blackbaud programs may also require additional steps as part of the installation. If

you have **Blackbaud CRM** or **Blackbaud Direct Marketing**, you can use the Blackbaud AppFx Configuration Manager to change settings and perform additional configuration tasks. You can also use the Deploy Data Warehouse Installation Wizard to create a data warehouse as a record source in the program. For information about post installation tasks, see Post-installation on page 48.

Infinity Platform

This section describes a simple setup for the Infinity platform. The purpose is to establish a functional environment suitable for demonstrations, "proof of concept," or development work. This is in no way a definitive guide to set up a secure and robust enterprise scale deployment.
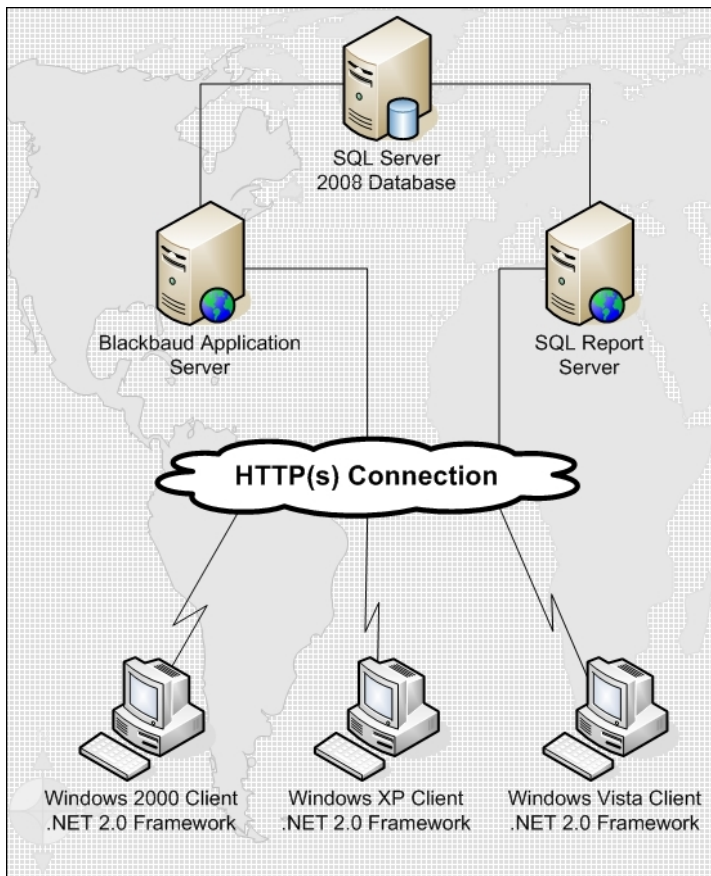
After you understand the basic setup, you can plan larger-scale and more advanced deployments. The Infinity platform is scalable, and can accommodate large organizations with complex networking needs. For example, failover servers, load balanced web servers, and firewalls can be used for more robust and secure installations.

The basic setup consists of a *SQL Server*, *SQL Report Server*, **Blackbaud Application Server**, and workstations with browsers that meet the Minimum System Requirements. You can extend this setup to include as many workstations or servers as necessary to meet the needs of your organization.

Install Considerations and Upgrade Paths

When you install or update your Blackbaud programs, the steps to follow depend on the programs that you have and whether you need to install them for the first time or update previous versions. The Blackbaud Installer allows you to install all your Infinity programs at the same time with a single installer, and many steps are the same for all programs and features. However, to ensure you follow the necessary steps to complete the installation or update for your programs, the following sections include upgrade instructions for various combinations of programs.

Blackbaud Program Features

The Blackbaud Installer allows you to install all Infinity programs at the same time with a single installer. The wizard uses your organization's site ID and email address to determine which programs your organization owns. You can then select the items to install on the Blackbaud Installer screen.

With the Blackbaud Installer, you can install **Blackbaud CRM**, **Blackbaud NetCommunity**, **Online Campus Community**, **Online Admissions**, and **Blackbaud Direct Marketing**.

> **Note:** Before you run the Blackbaud Installer, you must install .NET 4.5.2. Then, you must ensure that Internet Information Services is configured for .NET Framework 4.0 and uses the integrated managed pipeline mode. If IIS is not configured for .NET 4.0, you must run one of the following commands: "C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe. -i" for 32-bit machines or "C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis.exe. -i" for 64-bit machines.

Blackbaud Core Components

The Blackbaud Core Components include all files and configuration settings required to integrate **Blackbaud NetCommunity** with Infinity programs and the services required for your online applications to function properly. If you have **Blackbaud CRM**, this feature installs the Infinity web portal, which you use to access different areas and features of the program. You must install this feature on a web server during a new installation or an upgrade.

Blackbaud NetCommunity Website

The **Blackbaud NetCommunity** web application provides the website design and email tools to build and host your website.

NetCommunity Plug-in Service

The Raiser's Edge and **The Education Edge** plug-ins use the NetCommunity plug-in web service to download transactions from **Blackbaud NetCommunity** to **The Raiser's Edge** or **The Education Edge**.

The Raiser's Edge Plug-in

The Raiser's Edge uses this plug-in to communicate with **Blackbaud NetCommunity** and to import transactions. You must install **The Raiser's Edge** plug-in on each workstation that uses **The Raiser's Edge** to retrieve data from **Blackbaud NetCommunity**. For information about how to install just the plug-in, see Install the NetCommunity Plug-in on page 42.

The Education Edge Plug-in

The Education Edge uses this plug-in to communicate with **Blackbaud NetCommunity** and to import the transactions. You must install **The Education Edge** plug-in on each workstation that uses **The Education Edge** to retrieve data from **Blackbaud NetCommunity**. For information about how to install just the plug-in, see Install the NetCommunity Plug-in on page 42.

The Raiser's Edge Web Service

The **Blackbaud NetCommunity** web application uses **The Raiser's Edge** web service to communicate with **The Raiser's Edge**.

Roll Back Plan

Before you perform any tasks related to the installation and upgrade process, you must back up all of your Blackbaud databases. Depending on the programs that you have, this can include **Blackbaud CRM**, **The Raiser's Edge**, **Blackbaud NetCommunity**, and **Blackbaud Direct Marketing**.

Upgrade Paths

For a list of all the programs and features that you can select from the Blackbaud Installer, see Blackbaud Program Features on page 9. The Blackbaud programs that you purchase determine the features that appear on the Blackbaud Installer screen.

> **Note:** Antivirus software may prevent some functions that are necessary to install and ensure proper operation. Before you install, we recommend that you add the installation directory to your antivirus software's whitelist policy.

For upgrade instructions for different combinations of Blackbaud programs, see the following sections:

- The Raiser's Edge, Blackbaud NetCommunity, and Direct Marketing on page 11
- Blackbaud CRM and Blackbaud Internet Solutions on page 13
- NetCommunity and ResearchPoint on page 14
- Direct Marketing and ResearchPoint on page 14
- Direct Marketing, Blackbaud NetCommunity, and ResearchPoint on page 15

The Raiser's Edge, Blackbaud NetCommunity, and Direct Marketing

If you have **The Raiser's Edge** 7 and a version of **Blackbaud NetCommunity** prior to 6.15, before you upgrade **Blackbaud NetCommunity** and **Blackbaud Direct Marketing**, you must prepare your **Blackbaud NetCommunity** database to upgrade to the Infinity platform. To do this, you run a utility that adds Infinity tables to your database.

Because **Blackbaud Direct Marketing** is an Infinity program, you must install **Blackbaud CRM** 2.1. Then you can coordinate with **Blackbaud Direct Marketing** Support to merge your **Blackbaud NetCommunity** database, which is Infinity-based, with your **Blackbaud Direct Marketing** database. The merge does not affect the database for **The Raiser's Edge**; you will continue to use **The Raiser's Edge** to manage your data.

Follow the upgrade path to prepare for, perform, and complete the installation.

*Note: **The Raiser's Edge**, your **Blackbaud NetCommunity** website, and **Blackbaud Direct Marketing** are not available during the Infinity installation or upgrade. As a best practice, you can redirect website users to a maintenance page during the installation process.*

☐ Before you install, we strongly recommend that you familiarize yourself with the system requirements for each program. You can access system requirements on the Blackbaud website at http://www.blackbaud.com/products/system/requirements.aspx.

☐ We recommend that you schedule a minimum of four hours to complete the process.

☐ Back up all Blackbaud databases.

☐ If you have **The Education Edge**, upgrade to 7.82. For information about the upgrade, see the *7.82 Update Guide*.

☐ Back up the Custom folder in the **Blackbaud NetCommunity** directory.

☐ Back up your web.config files.

☐ Upgrade to **Blackbaud NetCommunity** 5.6, patch 5 or higher. For information about the upgrade, see the *5.6 Update and New Features Guide*.

Warning: Your customizations must be compatible with the new version of **Blackbaud NetCommunity**. If you created customizations, please contact your system administrator before you begin the update process. If Blackbaud created the customizations, please contact Blackbaud Support to verify you have the latest version of the customized files. For Support assistance, go to www.blackbaud.com/support.

- □ Install **Blackbaud CRM** 2.1. For information about the install, see the *2.1 Install Guide*.

- □ Upgrade to **Blackbaud Direct Marketing** 1.9 with the latest patch and run revisions. If you have a version prior to 1.9, upgrade to 1.9 but do not run revisions, and then upgrade to the latest patch and run revisions. For information about the upgrade, see the *1.9 Installation and Update Guide*.

- □ To upgrade **Blackbaud Direct Marketing** from a version prior to version 2.5, you must run a conversion utility to convert the upgraded **Blackbaud Direct Marketing** 1.9 database to the **Blackbaud CRM** 2.1 database. To receive the conversion utility, contact Blackbaud Support at bbdmsupport@blackbaud.com.

- □ Use the Blackbaud Installer to upgrade to **Blackbaud CRM** 2.7 and run revisions.

- □ Install.NET Framework 4.0 and configure it with *Internet Information Services*. Also, configure IIS to use the integrated managed pipeline mode. If IIS is not configured for .NET 4.0, run one of the following commands: "C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe. -i" for 32-bit machines or "C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis.exe. -i" for 64-bit machines.

- □ Use the Blackbaud Installer to install Infinity features. For information about the installer, see Install Blackbaud Infinity Features on page 23.

> **Warning:** Before you upgrade your Blackbaud programs, you must set the default language in Microsoft *SQL Server* to "English" for the database login account that performs the upgrade. If the default language is set to a different language, errors occur during the installation. After the installation, you can change the default language in *SQL Server* back to your preferred language. To change the language setting, open *SQL Server Management Studio*, right-click the server in **Object Explorer**, and select **Properties**. Under **Select a page**, select **Advanced**, and in the **Default Language** field under **Miscellaneous**, select "English."

- □ To include search functionality on your website, you must install Microsoft's *Full-Text Search* on the server with your database. Without *Full-Text Search*, the Quick Search and Search parts do not appear in Blackbaud NetCommunity. For information about how to implement *Full-Text Search*, see your *SQL Server* documentation.

- □ The version of **Blackbaud NetCommunity** you install when you upgrade to **Blackbaud CRM** 2.7 complies with the Payment Card Industry Data Security Standard (PCI DSS). If you have **The Raiser's Edge** 7.8.5, open the program and click **NetCommunity** before you upgrade to version 7.91 or higher. **The Raiser's Edge** accesses **Blackbaud NetCommunity** and updates the version number in the database. If you do not perform this step, you will receive a non-compliance error when you upgrade **The Raiser's Edge**.

> **Note:** During the upgrade, **The Raiser's Edge** 7.91 verifies that your version of **Blackbaud NetCommunity** complies with the Payment Card Industry Data Security Standard (PCI DSS). Therefore, we recommend that you complete the installation process to upgrade **Blackbaud NetCommunity** before you upgrade to **The Raiser's Edge** 7.91.

- □ Upgrade to **The Raiser's Edge** 7.91 or higher. As a best practice, we recommend that you use **The Raiser's Edge** 7.91, patch 12. For information about the upgrade, see the *7.91 Update Guide*.

- □ Complete the **Blackbaud Direct Marketing** and **Blackbaud NetCommunity** post-installation tasks. For information about these tasks, see Configuration Tasks on page 49 and Blackbaud NetCommunity Post-installation Tasks on page 69.

☐ For **Blackbaud Direct Marketing**, if you deployed the data warehouse, deploy it again to update the SSIS package and run revisions against the *Analysis Services* database. For more information, see Blackbaud Data Warehouse Deployment Wizard on page 58.

Blackbaud CRM and Blackbaud Internet Solutions

The Blackbaud Installer installs **Blackbaud CRM**and **Blackbaud Internet Solutions**. Follow the upgrade path to prepare for, perform, and complete the installation.

*Note: **Blackbaud CRM** and your **Blackbaud Internet Solutions** website are not available during the Infinity installation or upgrade. As a best practice, you can redirect website users to a maintenance page during the installation process.*

☐ Before you install, we strongly recommend that you familiarize yourself with the system requirements for each program. You can access system requirements on the Blackbaud website at http://www.blackbaud.com/products/system/requirements.aspx.

☐ We recommend that you schedule a minimum of four hours to complete the installation process.

☐ Back up all Blackbaud databases.

☐ Upgrade to **Blackbaud CRM** 2.1. For information about the upgrade, see the *2.1 Update Guide*.

☐ Back up the Custom folder in the **Blackbaud Internet Solutions** directory.

Warning: Your customizations must be compatible with the new version of **Blackbaud Internet Solutions**. If you created customizations, please contact your system administrator before you begin the update process. If Blackbaud created the customizations, please contact Blackbaud Support to verify you have the latest version of the customized files. For Support assistance, go to www.blackbaud.com/support.

☐ If you have not upgraded to **Blackbaud Internet Solutions** and have a version of **Blackbaud NetCommunity** prior to version 5.6, patch 5, upgrade to version 5.6, patch 5 or higher. For information about the upgrade, see the *5.6 Update and New Features Guide*.

☐ Install.NET Framework 2.0, service pack 1, and configure it with *Internet Information Services*. Also, configure IIS to use the integrated managed pipeline mode. If IIS is not configured for .NET 2.0, run one of the following commands: "C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe. -i" for 32-bit machines or "C:\WINDOWS\Microsoft.NET\Framework64\v2.0.50727\aspnet_regiis.exe. -i" for 64-bit machines.

☐ Use the Blackbaud Installer to install Infinity features. For information about the installer, see Install Blackbaud Infinity Features on page 23.

Warning: Before you upgrade your Blackbaud programs, you must set the default language in Microsoft *SQL Server* to "English" for the database login account that performs the upgrade. If the default language is set to a different language, errors occur during the installation. After the installation, you can change the default language in *SQL Server* back to your preferred language. To change the language setting, open *SQL Server Management Studio*, right-click the server in **Object Explorer**, and select **Properties**. Under **Select a page**, select **Advanced**, and in the **Default Language** field under **Miscellaneous**, select "English."

☐ To include search functionality on your website, you must install Microsoft's *Full-Text Search* on the server with your database. Without *Full-Text Search*, the Quick Search and Search parts do not appear in **Blackbaud Internet Solutions**. For information about how to implement *Full-Text Search*, see your *SQL Server* documentation.

☐ Complete the **Blackbaud CRM** and **Blackbaud Internet Solutions** post-installation tasks. For information about these tasks, see Configuration Tasks on page 49 and Blackbaud NetCommunity Post-installation Tasks on page 69.

NetCommunity and ResearchPoint

ResearchPoint is available only as a Software as a Service (SaaS) solution, and Blackbaud's Application Hosting team upgrades this program. If you have **The Raiser's Edge**, review the considerations in The Raiser's Edge, Blackbaud NetCommunity, and Direct Marketing on page 11. If you have **Blackbaud Enterprise CRM**, review the considerations in Blackbaud CRM and Blackbaud Internet Solutions on page 13.

Direct Marketing and ResearchPoint

Because **Blackbaud Direct Marketing** is an Infinity program, you must install **Blackbaud CRM** 2.1. After you have the latest patch for **Blackbaud Direct Marketing** 1.9, you must run a utility to convert the program to the **Blackbaud CRM** 2.1 database and then upgrade to **Blackbaud CRM** 2.7.

ResearchPoint is available only as a Software as a Service (SaaS) solution, and Blackbaud's Application Hosting team upgrades this program.

Follow the upgrade path to prepare for, perform, and complete the installation.

Note: Blackbaud Direct Marketing and ResearchPoint are not available during the upgrade process. Blackbaud will contact you to schedule the ResearchPoint upgrade.

☐ Before you install, we strongly recommend that you familiarize yourself with the system requirements for each program. You can access system requirements on the Blackbaud website at http://www.blackbaud.com/products/system/requirements.aspx.

☐ We recommend you schedule a minimum of four hours to complete the installation process.

☐ Install **Blackbaud CRM** 2.1. For information about the install, see the *2.1 Install Guide*.

☐ Upgrade to **Blackbaud Direct Marketing** 1.9 with the latest patch and run revisions. If you have a version prior to 1.9, upgrade to 1.9 but do not run revisions, and then upgrade to the latest patch and run revisions. For information about the upgrade, see the *1.9 Installation and Update Guide*.

☐ To upgrade **Blackbaud Direct Marketing** from a version prior to version 2.5, you must run a conversion utility to convert the upgraded **Blackbaud Direct Marketing** 1.9 database to the **Blackbaud CRM** 2.1 database. To receive the conversion utility, contact Blackbaud Support at bbdmsupport@blackbaud.com.

☐ Use the Blackbaud Installer to upgrade to **Blackbaud CRM** 2.7 and run revisions.

☐ Install .NET Framework 2.0, service pack 1, and configure it with *Internet Information Services*. Also, configure IIS to use the integrated managed pipeline mode. If IIS is not configured for .NET 2.0,

run one of the following commands: "C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_
regiis.exe. -i" for 32-bit machines or
"C:\WINDOWS\Microsoft.NET\Framework64\v2.0.50727\aspnet_regiis.exe. -i" for 64-bit machines.

☐ Use the Blackbaud Installer to install Infinity features. For information about the installer, see Install
Blackbaud Infinity Features on page 23.

Warning: Before you upgrade your Blackbaud programs, you must set the default language in
Microsoft *SQL Server* to "English" for the database login account that performs the upgrade. If the
default language is set to a different language, errors occur during the installation. After the
installation, you can change the default language in *SQL Server* back to your preferred language. To
change the language setting, open *SQL Server Management Studio*, right-click the server in **Object
Explorer**, and select **Properties**. Under **Select a page**, select **Advanced**, and in the **Default Language**
field under **Miscellaneous**, select "English."

☐ The version of **Blackbaud Internet Solutions** you install when you upgrade to **Blackbaud CRM**
2.7 complies with the Payment Card Industry Data Security Standard (PCI DSS). If you have **The
Raiser's Edge** 7.8.5, open **Blackbaud NetCommunity** and click **NetCommunity** before you
upgrade to version 7.91 or higher. **The Raiser's Edge** accesses **Blackbaud NetCommunity** and
updates the version number in the database. If you do not perform this step, you will receive a
non-compliance error when you upgrade **The Raiser's Edge**.

Note: During the upgrade, **The Raiser's Edge** 7.91 verifies that your version of **Blackbaud
NetCommunity** complies with the Payment Card Industry Data Security Standard (PCI DSS). Therefore,
we recommend that you complete the installation process to upgrade **Blackbaud NetCommunity**
before you upgrade to **The Raiser's Edge** 7.91.

☐ Upgrade to **The Raiser's Edge** 7.91 or higher. For information about the upgrade, see the *7.91
Update Guide*.

☐ Complete the **Blackbaud Direct Marketing** post-installation tasks. For information about these
tasks, see Configuration Tasks on page 49. If you deployed the data warehouse, deploy it again to
update the SSIS package and run revisions against the *Analysis Services* database. For more
information, see Blackbaud Data Warehouse Deployment Wizard on page 58.

Direct Marketing, Blackbaud NetCommunity, and ResearchPoint

If you have **The Raiser's Edge** 7 and a version of **Blackbaud NetCommunity** prior to 6.15, before you
upgrade **Blackbaud NetCommunity** and **Blackbaud Direct Marketing**, you must prepare your
current **Blackbaud NetCommunity** database to upgrade to the Infinity platform. To do this, you run a
utility that adds Infinity tables to your database.

Because **Blackbaud Direct Marketing** is an Infinity program, you must install **Blackbaud CRM** 2.1.
Then, you can coordinate with **Blackbaud Direct Marketing** Support to merge your post 6.15
Blackbaud NetCommunity database, which is Infinity-based, with your **Blackbaud Direct Marketing**
database. The merge does not affect the database for **The Raiser's Edge**; you will continue to use **The
Raiser's Edge** to manage your data.

Although **ResearchPoint** is also an Infinity program, this database runs separately from your Infinity database because it is a Software as a Service (SaaS) solution. Blackbaud Support will contact you to coordinate the upgrade for **ResearchPoint**.

Follow the upgrade path to prepare for, perform, and complete the installation.

Note: Your **Blackbaud NetCommunity** website is not available during the installation. As a best practice, you can redirect website users to a maintenance page during the installation process.

- Before you install, we strongly recommend that you familiarize yourself with the system requirements for each program. You can access system requirements on the Blackbaud website at http://www.blackbaud.com/products/system/requirements.aspx.

- We recommend you schedule a minimum of four hours to complete the installation process.

- Back up all Blackbaud databases.

- If you have **The Education Edge**, upgrade to 7.82. For information about the upgrade, see the *7.82 Update Guide*.

- Back up the Custom folder in the Blackbaud NetCommunity directory.

Warning: Your customizations must be compatible with Blackbaud NetCommunity 6.25. If you created the customizations, please contact your system administrator before you begin the update process. If Blackbaud created the customizations, please contact Blackbaud Support to verify you have the latest version of the customized files. For Support assistance, go to www.blackbaud.com/support.

- If you have a version of **Blackbaud NetCommunity** prior to 5.6, patch 5, upgrade to version 5.6, patch 5 or higher now. For information about the upgrade, see the *5.6 Update and New Features Guide*.

- Install **Blackbaud CRM** 2.1. For information about the install, see the *2.1 Install Guide*.

- Upgrade to **Blackbaud Direct Marketing** 1.9 with the latest patch and run revisions. If you have a version prior to 1.9, upgrade to 1.9 but do not run revisions, and then upgrade to the latest patch and run revisions. For information about the upgrade, see the *1.9 Installation and Update Guide*.

- To upgrade **Blackbaud Direct Marketing** from a version prior to version 2.5, you must run a conversion utility to convert the upgraded **Blackbaud Direct Marketing** 1.9 database to the **Blackbaud CRM** 2.1 database. To receive the conversion utility, contact Blackbaud Support at bbdmsupport@blackbaud.com.

- Blackbaud will run a merge utility to merge your **Blackbaud NetCommunity** and **Blackbaud Direct Marketing** Infinity databases. For information about the merge utility, contact Blackbaud Support.

- Use the Blackbaud Installer to upgrade to **Blackbaud CRM** 2.7 and run revisions.

- Install.NET Framework 4.5.2, and configure it with *Internet Information Services*. Also, configure IIS to use the integrated managed pipeline mode. If IIS is not configured for .NET 4.0, run one of the following commands: "C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe. -i" for 32-bit machines or "C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis.exe. -i" for 64-bit machines.

- Use the Blackbaud Installer to install Infinity features. For information about the installer, see Install Blackbaud Infinity Features on page 23.

Warning: Before you upgrade your Blackbaud programs, you must set the default language in Microsoft *SQL Server* to "English" for the database login account that performs the upgrade. If the default language is set to a different language, errors occur during the installation. After the installation, you can change the default language in *SQL Server* back to your preferred language. To change the language setting, open *SQL Server Management Studio*, right-click the server in **Object Explorer**, and select **Properties**. Under **Select a page**, select **Advanced**, and in the **Default Language** field under **Miscellaneous**, select "English."

☐ To include search functionality on your website, you must install Microsoft's *Full-Text Search* on the server with your database. Without *Full-Text Search*, the Quick Search and Search parts do not appear in **Blackbaud NetCommunity**. For information about how to implement *Full-Text Search*, see your *SQL Server* documentation.

☐ The version of **Blackbaud NetCommunity** you install when you upgrade to **Blackbaud CRM** 2.7 complies with the Payment Card Industry Data Security Standard (PCI DSS). If you have **The Raiser's Edge** 7.8.5, open the program and click **NetCommunity** before you upgrade to version 7.91 or higher. **The Raiser's Edge** accesses **Blackbaud NetCommunity** and updates the version number in the database. If you do not perform this step, you will receive a non-compliance error when you upgrade **The Raiser's Edge**.

Note: During the upgrade, **The Raiser's Edge** 7.91 verifies that your version of **Blackbaud NetCommunity** helps you comply with the Payment Card Industry Data Security Standard (PCI DSS). Therefore, we recommend that you complete the installation process to upgrade **Blackbaud NetCommunity** before you upgrade to **The Raiser's Edge** 7.91.

☐ Upgrade to **The Raiser's Edge** 7.91 or higher. As a best practice, we recommend that you use **The Raiser's Edge** 7.91, patch 12. For information about the upgrade, see the *7.91 Update Guide*.

☐ Complete the **Blackbaud Direct Marketing** and **Blackbaud NetCommunity** post-installation tasks. For information about these tasks, see Configuration Tasks on page 49 and Blackbaud NetCommunity Post-installation Tasks on page 69.

☐ For **Blackbaud Direct Marketing**, if you deployed the data warehouse, deploy it again to update the SSIS package and run revisions against the *Analysis Services* database. For more information, see Blackbaud Data Warehouse Deployment Wizard on page 58.

Install Infinity Programs

Before you prepare your databases or begin the installation process, we recommend you review the steps in the Installation Overview on page 6 and review the upgrade path information for your programs in Upgrade Paths on page 10.

The products you currently have determine the tasks that you must perform to upgrade *Blackbaud CRM*, *Blackbaud NetCommunity*, or *Blackbaud Direct Marketing*. Although *ResearchPoint* is also an Infinity product, it is a Software as a Service (SaaS) solution. Therefore, Blackbaud performs any installation or upgrade tasks required for this product.

Warning: Before you begin the installation or upgrade process, back up all current Blackbaud databases.

Note: We recommend you schedule a minimum of four hours to install or upgrade your Infinity programs.

Prepare Blackbaud NetCommunity

For *Blackbaud NetCommunity* users who do not currently have any programs on the Infinity platform, you must run the Infinitizer.exe program to update your *Blackbaud NetCommunity* database with Infinity tables. This process affects your website's performance, so we recommend that you perform the task when your website experiences the least traffic.

Note: You only perform this task if you have *The Raiser's Edge* 7 or higher and are updating from a version of *Blackbaud NetCommunity* between 5.6 patch 5 and 6.10 to a version after 6.10.
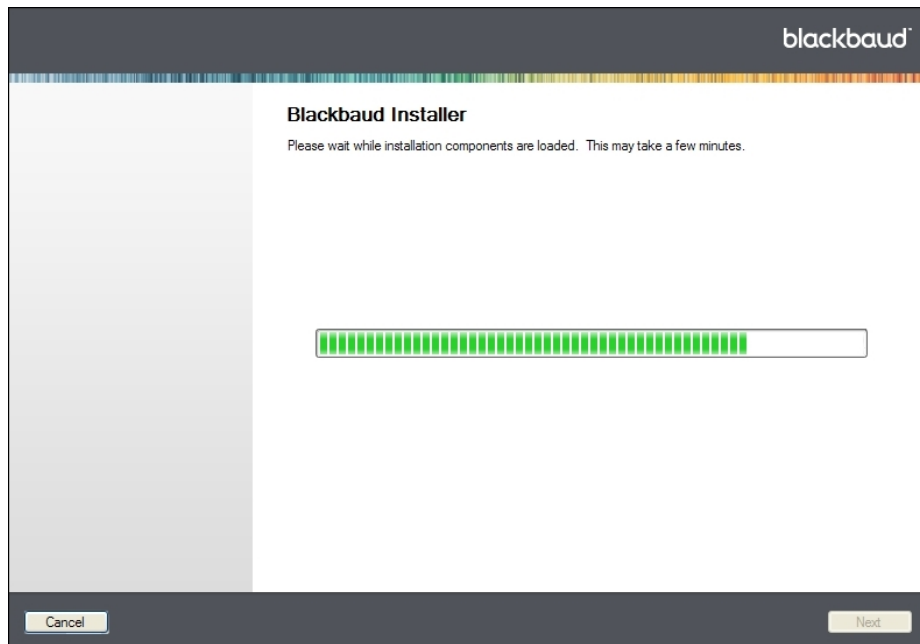
> Update the Blackbaud NetCommunity database

We recommend that you run the Infinitizer.exe program on the server where you installed the **Blackbaud NetCommunity** database. This task updates your database with specific Infinity tables to successfully complete the installation and upgrade process for version 6.15 and later versions.
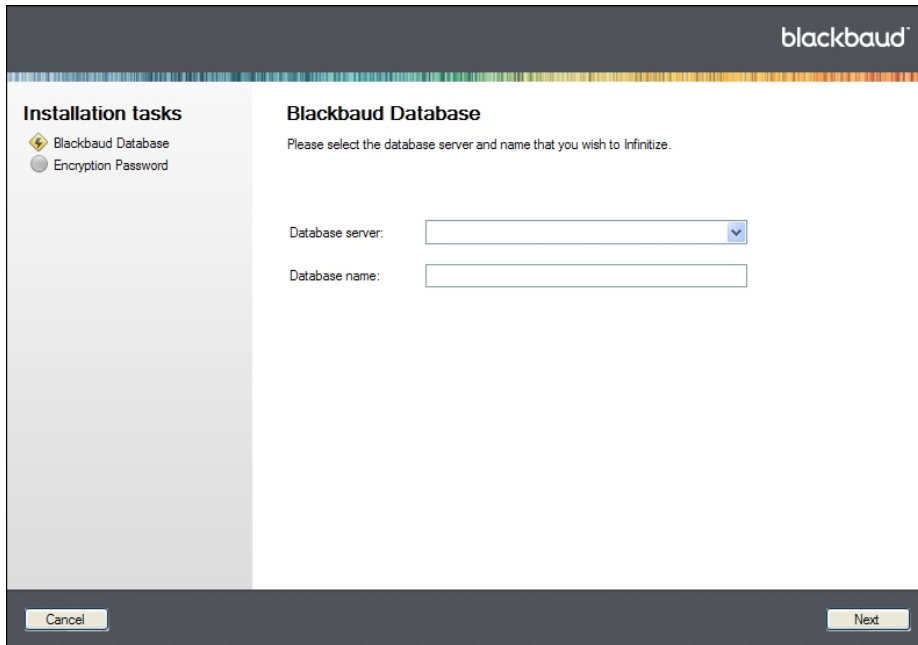
1. Double-click Infinitizer.exe to start the database upgrade. A progress screen appears.

Warning: Before you run the Infinitizer.exe program to update your **Blackbaud NetCommunity** database, you must back up the databases for **Blackbaud NetCommunity** and **The Raiser's Edge**.

Warning: If you run the Infinitizer.exe program while your website is operational, the update process affects performance. We recommend you Infinitize your database when your website experiences the least traffic.


After the installation components load, the NetCommunity Database screen appears.

2. In the **Database server** field, enter the name of the *SQL Server* instance for the ***Blackbaud NetCommunity*** database.

3. In the **Database name** field, enter the name of the database.

Note: The installer uses your *Windows* authentication credentials to connect to the ***Blackbaud NetCommunity*** database. If *Windows* authentication fails, the installer prompts you to connect with *SQL Server* authentication. On the screen that appears, enter a user name and password to connect to the *SQL Server* instance for the ***Blackbaud NetCommunity*** database.

4. Click **Next**. The Encryption Password screen appears.
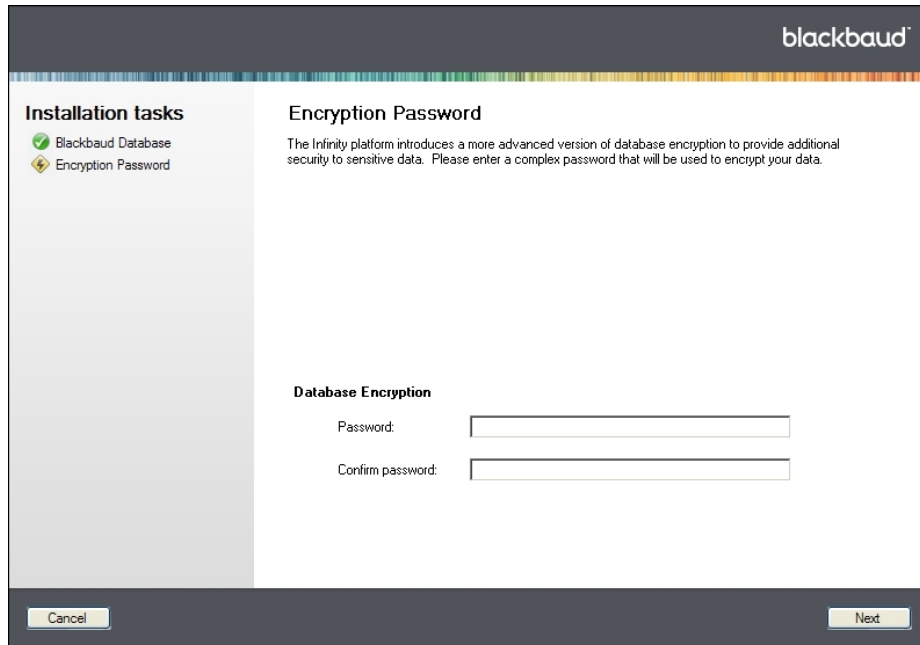
5. Under **Database Encryption**, enter the key to use to encrypt the database. The key must be at least eight characters and contain at least three of the following character types: uppercase letters, lowercase letters, numbers, and nonalphanumeric characters such as "!," "@," and "#."

Warning: It is extremely important that you save the encryption key in a secure location. If you move the Infinity database at a later time, you must have this encryption key in order to decrypt the information after you move or copy the database to a different server. If you move your database and do not have the encryption key, you can permanently lose your database.

6. Click **Next**. The confirmation screen appears.
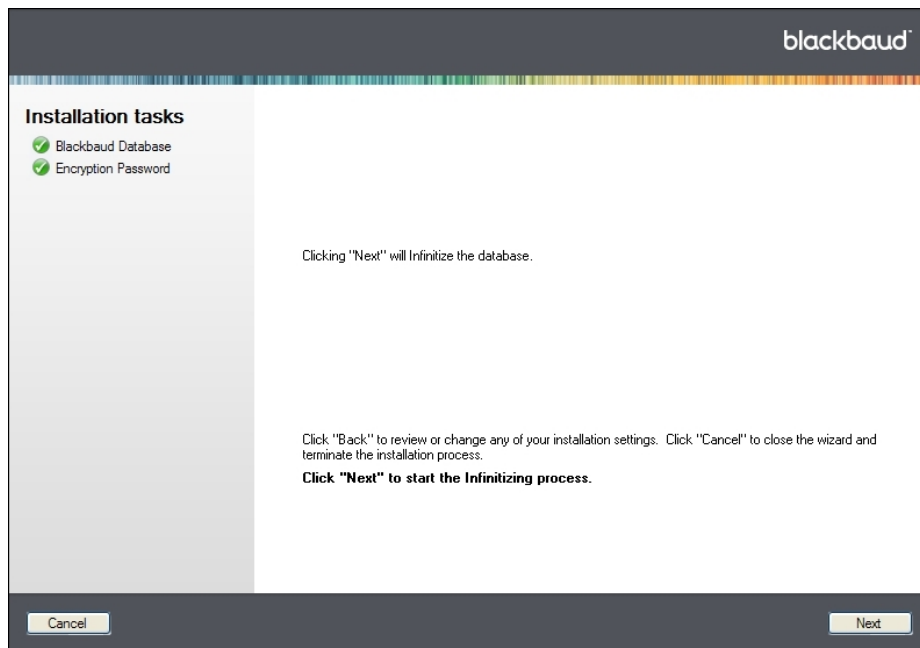
7. To update the **Blackbaud NetCommunity** database, click **Next**. The database upgrade progress screen appears. A green checkmark appears by each task that is successfully completed.
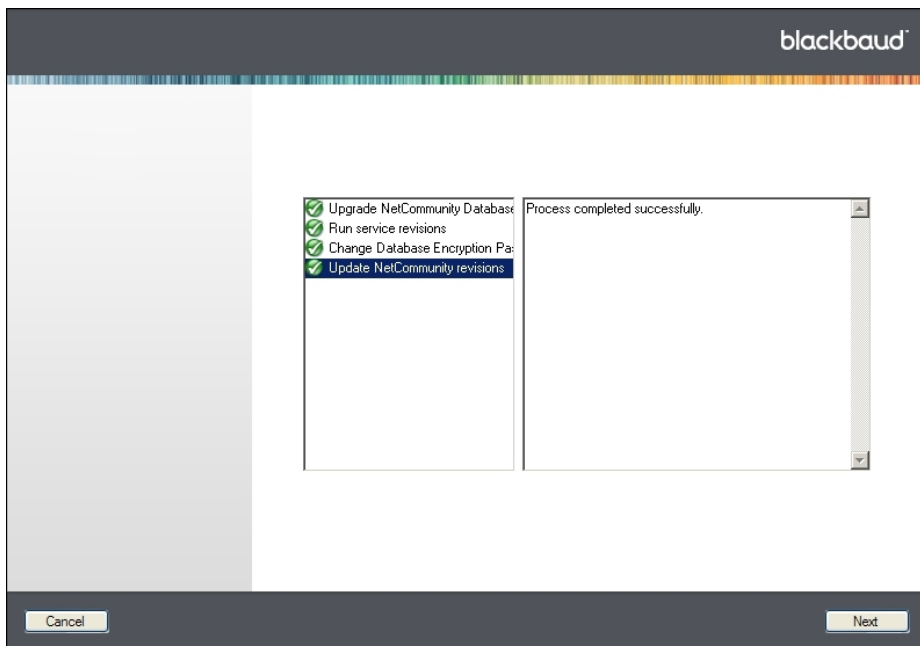
Note: During this upgrade process, your **Blackbaud NetCommunity** website is operational, but website users may experience performance issues.

8. Click **Next**. The installation complete screen appears.

9. To exit the program, click **Close**.

Post-update Task

The version of **Blackbaud NetCommunity** you install when you upgrade complies with the Payment Card Industry Data Security Standard (PCI DSS). If you have **The Raiser's Edge** 7.8.5, open the program and click **NetCommunity** before you upgrade to version 7.91 or higher. **The Raiser's Edge** accesses **Blackbaud NetCommunity** and updates the version number in the database. If you do not perform this step, you will receive a non-compliance error when you upgrade **The Raiser's Edge**.

Install Blackbaud Infinity Features

With the Blackbaud Installer, you can install all the features for an integrated solution at one time. You do not need to complete separate installations for each product. You can run the installation wizard multiple times to install features on servers and workstations according to the configuration needs of your organization's network architecture.

Note: If the installation takes longer than four hours to complete, please contact Blackbaud Support.

To review the recommended default configurations for **Blackbaud NetCommunity**, see the *Configuration Overview*. To access the latest version of this guide, go to www.blackbaud.com. In the **Support** menu, select **User Guides**.

Note: If you have **The Raiser's Edge** 7 or higher and are updating from a version of **Blackbaud NetCommunity** between 5.6 patch 5 and 6.10 to a version after 6.10, do not perform this task until you run the installer645.exe utility. For more information, see Prepare Blackbaud NetCommunity on page 18.

Warning: Before you run the BlackbaudInstaller.exe to upgrade your Blackbaud programs, you must back up your current Blackbaud databases.

Warning: For **Blackbaud NetCommunity** users, make sure your website is not available to users before you run the Blackbaud Installer.

Warning: Before you upgrade your Blackbaud products, you must set the default language in Microsoft *SQL Server* to "English" for the database login account that performs the upgrade. If the default language is set to a different language, errors occur during the installation. After the installation, you can change the default language in *SQL Server* back to your preferred language. To change the language setting, open *SQL Server Management Studio*, right-click the server in **Object Explorer**, and select **Properties**. Under **Select a page**, select **Advanced**, and in the **Default Language** field under **Miscellaneous**, select "English."
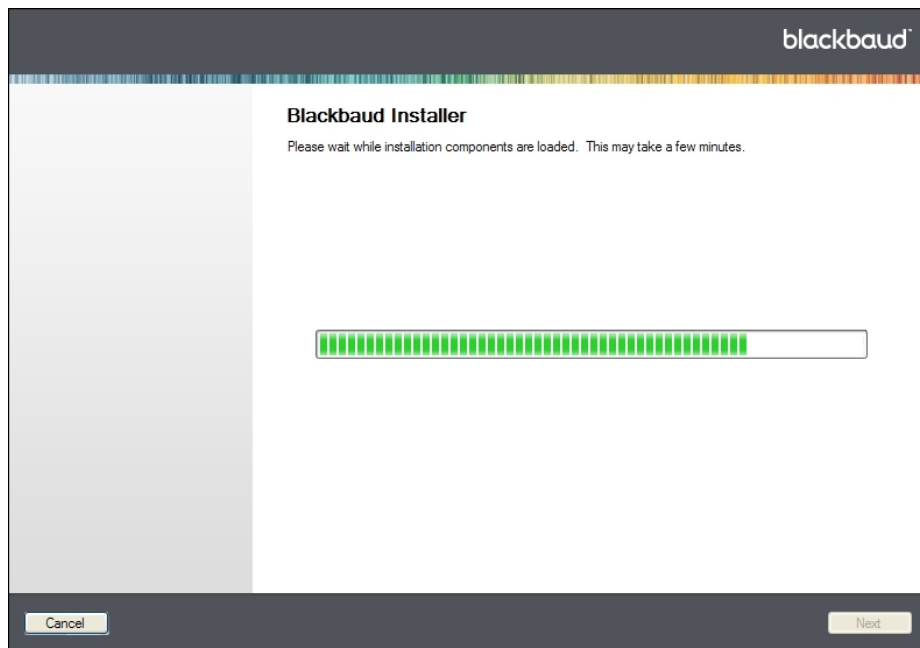
Warning: Before you install **Blackbaud CRM** or **Blackbaud NetCommunity** on a machine that runs Microsoft *Windows Server 2008 R2*, you must change the user account for the Default Application Pool to **NT Authority\Network Service** or to a network account with administrative rights in **Blackbaud CRM**. By default, the Default Application Pool runs under the **IIS AppPool\DefaultAppPool** user account. If you do not change the account, an error occurs after installation. For information about how to change the user account, go to http://technet.microsoft.com/en-us/library/cc731755(WS.10).aspx.
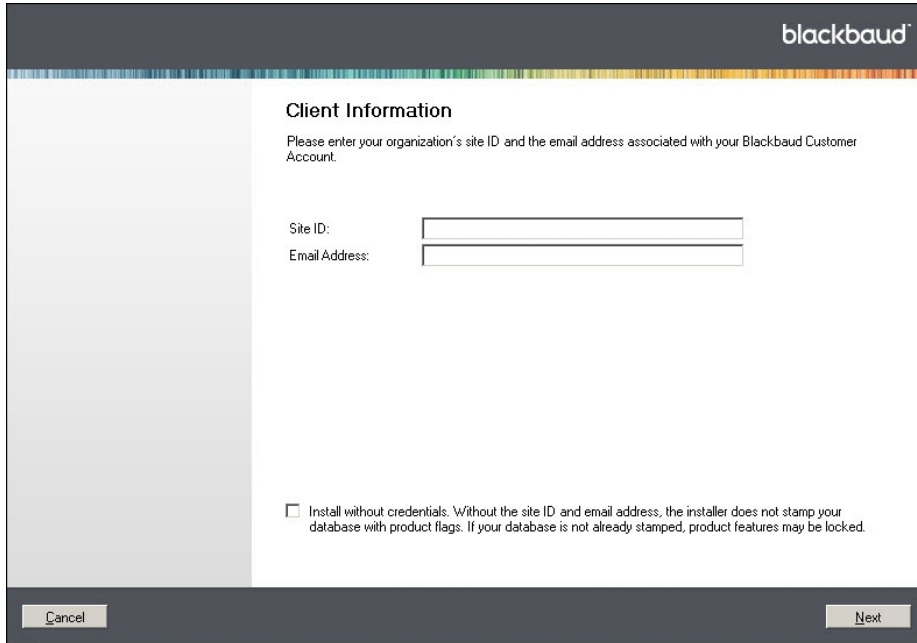
› Install Blackbaud Infinity features

Please review Install Considerations and Upgrade Paths on page 9 before you begin the installation process.

Note: By default, the Blackbaud Installer runs revisions to update your database. To install without running revisions, see Skip Revisions on page 41.

1. Double-click BlackbaudInstaller.exe to start the installation. A progress screen appears.

After the installation components load, the Client Information screen appears.

2. In the **Site ID** field, enter the unique client ID you received from your Blackbaud account manager.

3. In the **Email Address** field, enter the email address associated with your Blackbaud account.

   The Blackbaud Installer uses your site ID and email address to ensure the installation includes all features that your organization purchased. To install without your credentials, select **Install without credentials**. When you select this checkbox, the installer does not stamp the database, and product features may be locked if the database is not already stamped.

Note: To request your site ID or email address, email solutions@blackbaud.com or call 1-800-443-9441.

4. Click **Next**. The Blackbaud Installer screen appears. The Infinity products that are available for your organization appear in the **Features to install** box.
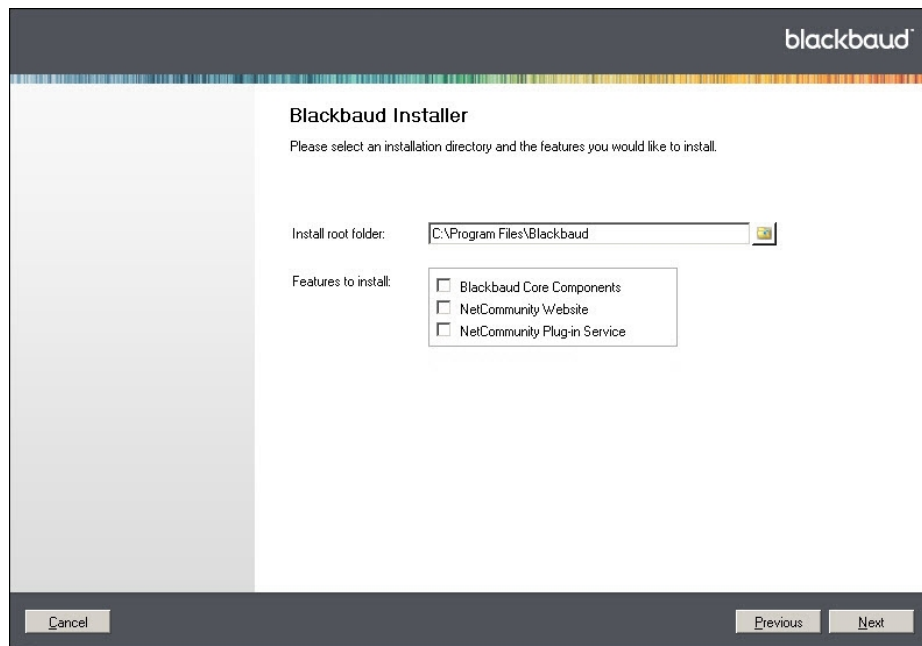
Warning: You must install **Blackbaud Core Components** on a web server during a new installation or an upgrade from a version that did not include the feature. This feature includes services required by your Blackbaud online applications.

5. Select the features to install. Your selections determine which installation screens appear. For information about each feature, see Blackbaud Program Features on page 9.

Note: To integrate **Blackbaud NetCommunity** with **The Raiser's Edge**, you must upgrade to **The Raiser's Edge** 7.91 or higher before you continue with the installation. As a best practice, we recommend that you use **The Raiser's Edge** 7.91, patch 12.

Note: NetCommunity Windows Service no longer appears in the **Features to install** box because the NetCommunity Windows Service was replaced with an Infinity scheduling framework. The service provided the ability for the website to run scheduled processes offline. When you upgrade from a version that includes the NetCommunity Windows Service, the Blackbaud Installer removes the service and replaces its scheduled processes with business processes that run through the Infinity scheduling framework.

6. Click **Next**. The Database Connection screen appears.

7. In the **Database server** and **Database name** fields, enter the *SQL Server* instance and database name from when you installed the database.

Note: The installer uses your *Windows* authentication credentials to connect to your database. If *Windows* authentication fails, the installer prompts you to connect with *SQL Server* authentication. On the screen that appears, enter a user name and password to connect to the *SQL Server* instance for the database.

8. Select how to connect to the *SQL Server* instance.

- To use *Windows* authentication, select **Windows authentication**. On the CMS Application User screen, you will select whether to use the default network service or credentials for a specific user account.

- To use *SQL Server* authentication, select **SQL Server authentication** and enter the user name and password to connect to the *SQL Server* instance.

9. Click **Next**.

- For *Windows* authentication, the CMS Application User screen appears.

- For *SQL Server* authentication, you advance to the NetCommunity Website screen.
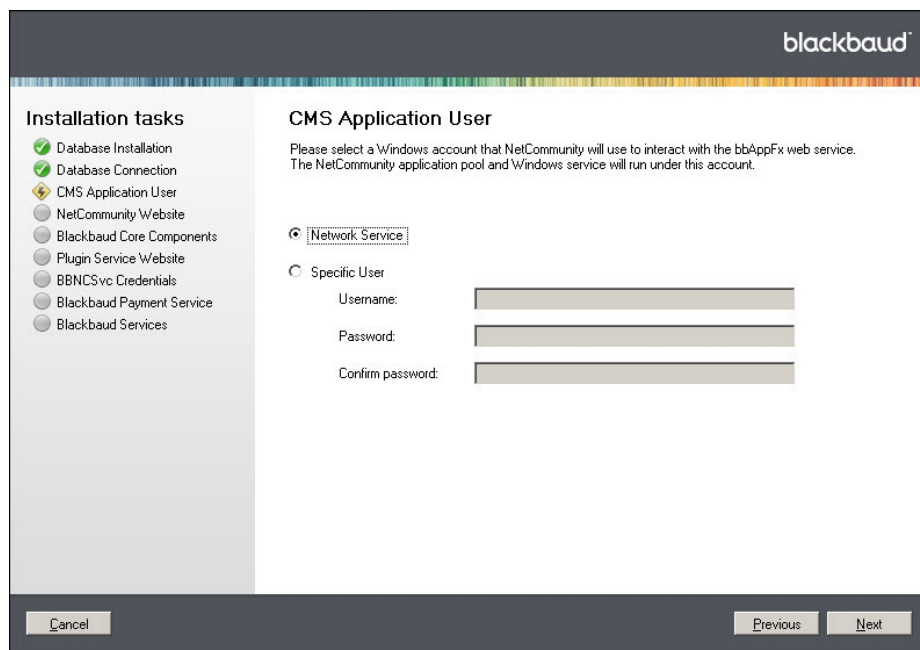
10. On the CMS Application User screen, select the account to use to connect to the *SQL Server* instance.
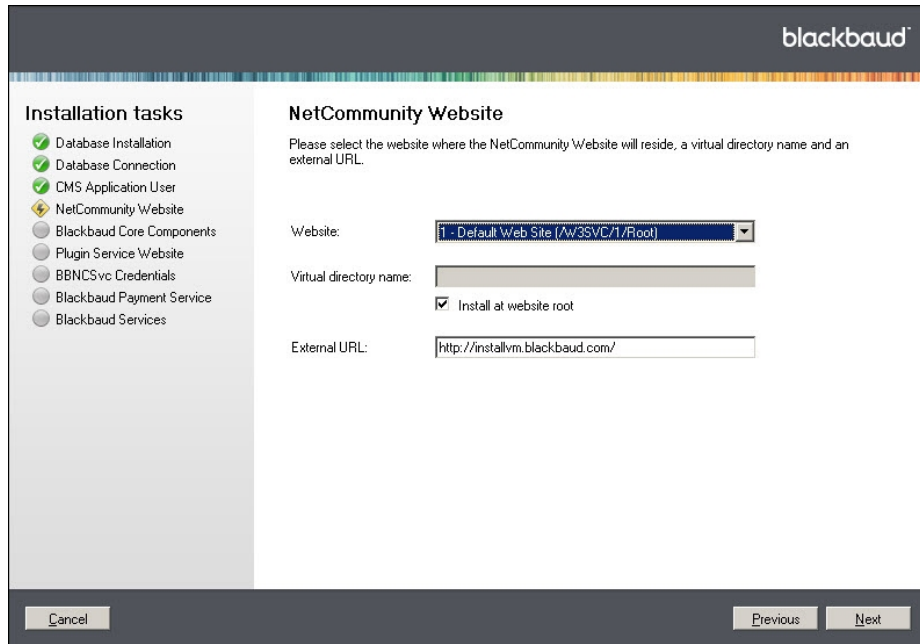
   • To use the default network service account to connect to the bbAppFx web service, select **Network Service**. For *Windows* authentication, **Blackbaud NetCommunity** also uses the default network service account to connect the *SQL Server* instance.

Warning: If you select **Network Service**, you must be logged in with a network account that has local administrative rights to continue with the installation.

   • To use a *Windows* user account to connect to the bbAppFx web service, select **Specific User** and enter the user name and password. For *Windows* authentication, **Blackbaud NetCommunity** also uses this account to connect the *SQL Server* instance.

Note: The program adds the account you select on the CMS Application User screen as an application user with system administrator rights in **Blackbaud CRM**. If you later run the **Blackbaud NetCommunity** application pool as a different user, you must grant system administrative rights to the application user you select. For information about how to add an application user and grant system administrator rights in **Blackbaud CRM**, see the *Administration Guide*.

11. Click **Next**. The NetCommunity Website screen appears.
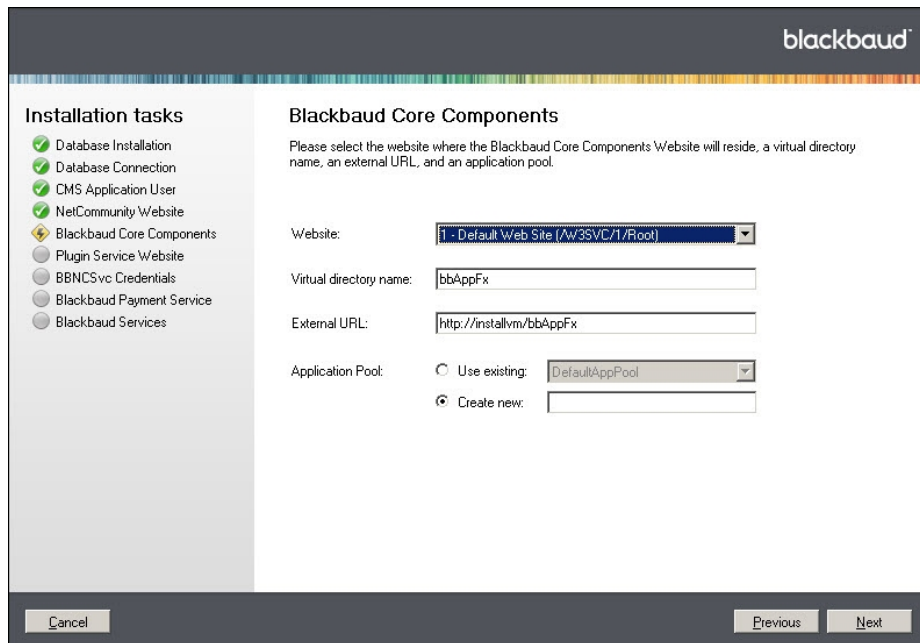
12. In the **Website** field, select the website where the ***Blackbaud NetCommunity*** site will reside.

13. In the **Virtual directory name** field, enter a name for the directory. This name appears at the end of the URL in the **External URL** field.

14. To not use a virtual directory, select **Install at website root**. This disables the **Virtual directory name** field and removes the directory from the URL in the **External URL** field.

15. In the **External URL** field, edit the URL for your website if it is different than the default entry.

16. Click **Next**. The Blackbaud Core Components screen appears.

17. In the **Website** field, select the website on which the Infinity web portal site will reside.

18. In the **Virtual directory name** field, enter a name for the directory.

19. In the **External URL** field, edit the URL for the Blackbaud Core Components site if it is different than the default entry.

20. In the **Application Pool** field, select whether to use an existing application pool or create a new one.

21. Click **Next**. The Plugin Service Website screen appears.

22. In the **Website** field, select the website on which the plug-in service site will reside.

23. In the **Virtual directory name** field, enter a name for the directory. The name appears at the end of the URL in the **External URL** field.

24. In the **External URL** field, edit the URL for the plug-in web service site if it is different than the default entry.

25. Click **Next**. The Raiser's Edge Web Service screen appears. This screen appears only when you have *The Raiser's Edge* and install *Blackbaud NetCommunity*.

26. In the **Website** field, select the website where **The Raiser's Edge** web service site will reside.

27. In the **Virtual directory name** field, enter a name for the directory. The name appears at the end of the URL in the **External URL** field.

28. In the **External URL** field, edit the URL for the plug-in web service if it is different than the default entry.

29. Click **Next**. The BBNCSvc Credentials screen appears. This screen appears only when you have **Blackbaud CRM**.

30. Enter the password for **Blackbaud Internet Solutions** to access the BBNCSvc web service. The web service allows **Blackbaud CRM** and **Blackbaud Internet Solutions** to communicate.

Warning: We strongly recommend you use complex passwords. A complex password must contain at least eight characters, including at least one uppercase and lowercase letter, as well as at least one number or nonalphanumeric character such as "!," "@," and "#."
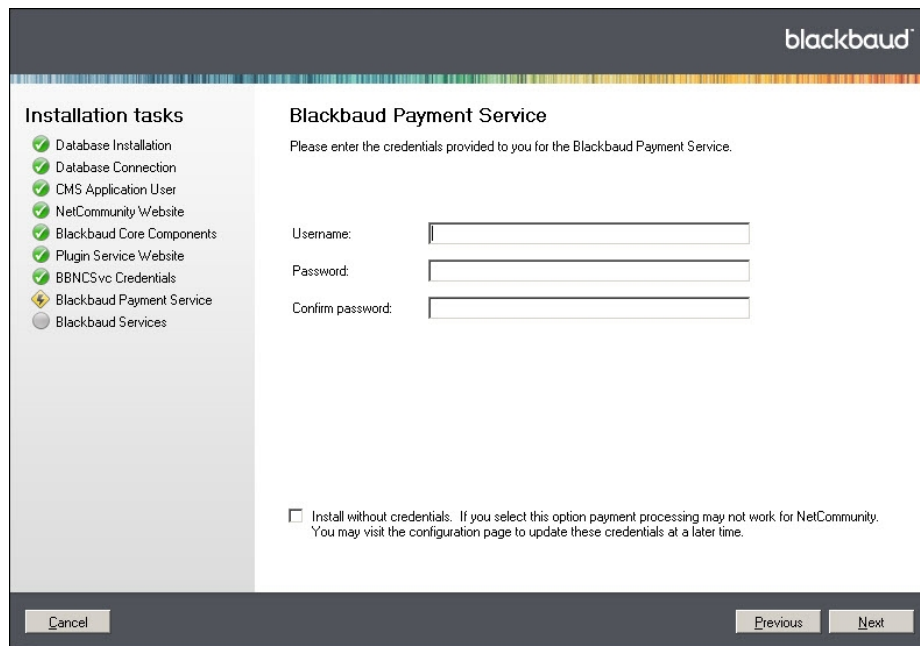
31. Click **Next**. The RE7Service Credentials screen appears. This screen appears only when you have **The Raiser's Edge** and select to install **Blackbaud NetCommunity**.

32. Enter the password for **Blackbaud NetCommunity** to access the RE7Service web service.

Warning: We strongly recommend you use complex passwords. A complex password must contain at least eight characters, including at least one uppercase and lowercase letter, as well as at least one number or nonalphanumeric character such as "!," "@," and "#."

33. Click **Next**. The Blackbaud Payment Service screen appears.

Note: Blackbaud *Payment Service* securely stores credit card and merchant account information to help you comply with the Payment Card Industry Data Security Standards (PCI DSS). You must set up a Blackbaud *Payment Service* account before you can complete the installation process.

34. Enter the Blackbaud *Payment Service* login credentials that you received from your Blackbaud account manager.

Note: To request your login credentials, email solutions@blackbaud.com or call 1-800-443-9441.

35. Click **Next**. The Blackbaud Services screen appears. This screen appears only if your Blackbaud website is hosted by Blackbaud Application Hosting.

36. On this screen, enter the Blackbaud Services login credentials thatyou received from your Blackbaud account manager.

Note: To request your login credentials, email solutions@blackbaud.com or call 1-800-443-9441.

37. Click **Next**. The Confirmation screen appears. This screen displays your installation settings.

Tip: When you update the program, the installer runs revisions by default to update your database. If you have multiple databases, the installer only updates the database listed on this screen. For the other databases, you must run revisions manually. If you want to install without running revisions, see Skip Revisions on page 41.
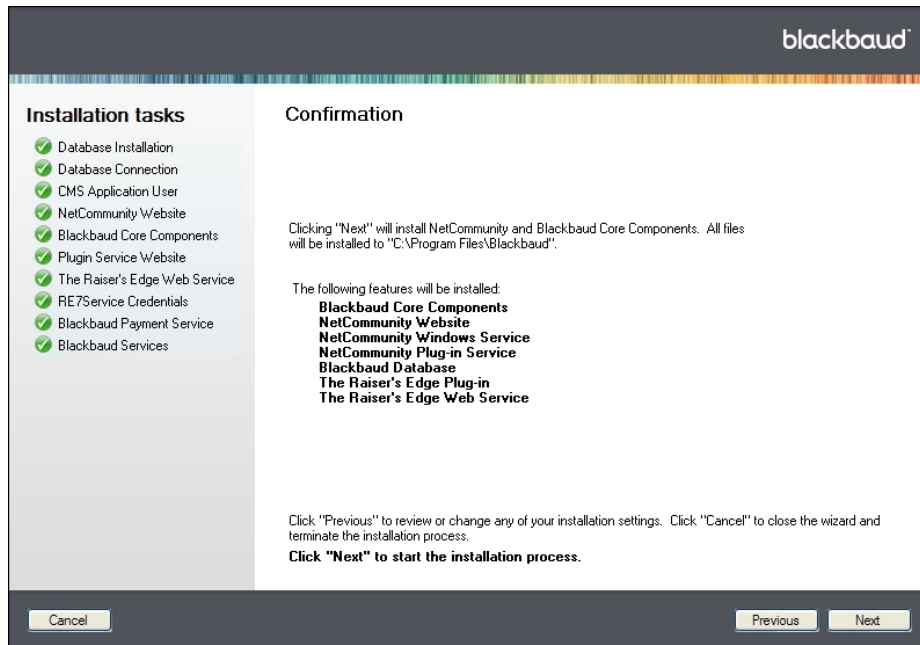
38. To begin the installation, click **Next**. The installation progress screen appears.
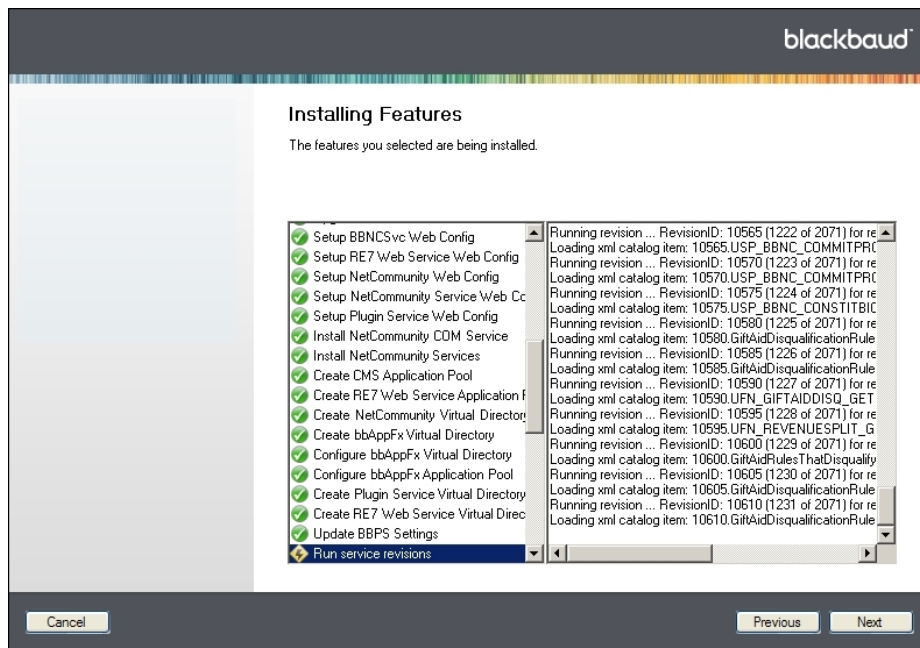
39. This screen monitors the status of each task in the installation. On the left, the current task is highlighted. On the right, a log describes the progress of the task.

As each task finishes, a green checkmark icon or red X icon indicates whether it was successful. If a task fails, you can select it to view the progress log and error messages.

Note: If the installation takes longer than four hours to complete, contact Blackbaud Support.

40. After the process finishes, click **Next**. The installation summary screen appears.
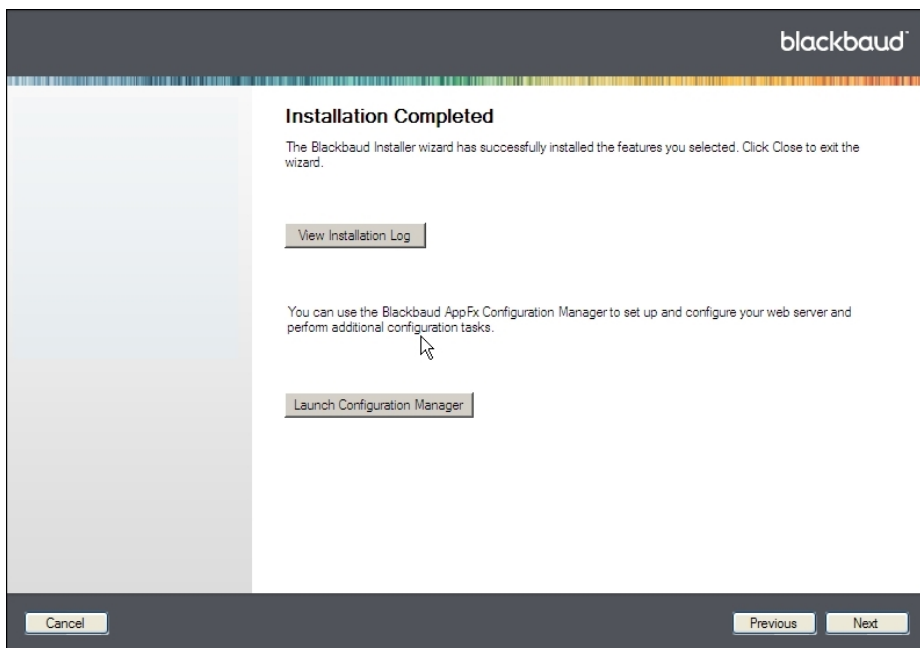
41. The installation summary screen displays the results of the installation.

- To open a text file that describes the installation, click **View Installation Log**.

Note: A log file that describes installation activity is created regardless of whether errors occur. You can find the installation log file in the \Local Settings\Temp folder for the user who installs the *Application Server*. For example, for the administrator, a log is created in the C:\Documents and Settings\Administrator\Local Settings\Temp folder.

42. To exit the Blackbaud Installer, click **Close**.

Install Multiple Instances on a Server

After you complete the installation, you can install and configure additional Infinity instances on the same server. To install the first Infinity instance, follow the steps in Install Blackbaud Infinity Features on page 23.

> **Install an additional Infinity instance**

1. From **Start** menu, select **Run**. The Run screen appears.
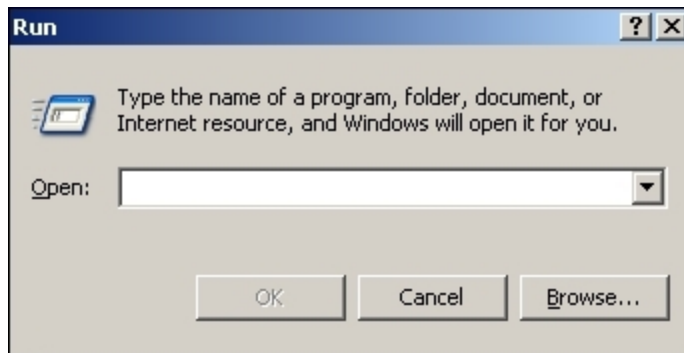
2. Enter the following command:

[path]\BlackbaudInstaller.exe /install:[install name]

```
[path]\BlackbaudInstaller.exe /install:[install name]
```

where "`[path]`" is the location where you saved the Blackbaud installation files and "`[install name]`" is the name to use for the new installation.

Note: You must use the command line switch to install a second Infinity instance. If you run the BlackbaudInstaller.exe after you install the first instance but do not use the command line switch, the installer assumes you want to upgrade the existing installation.

3. Click **OK**. A progress screen appears.
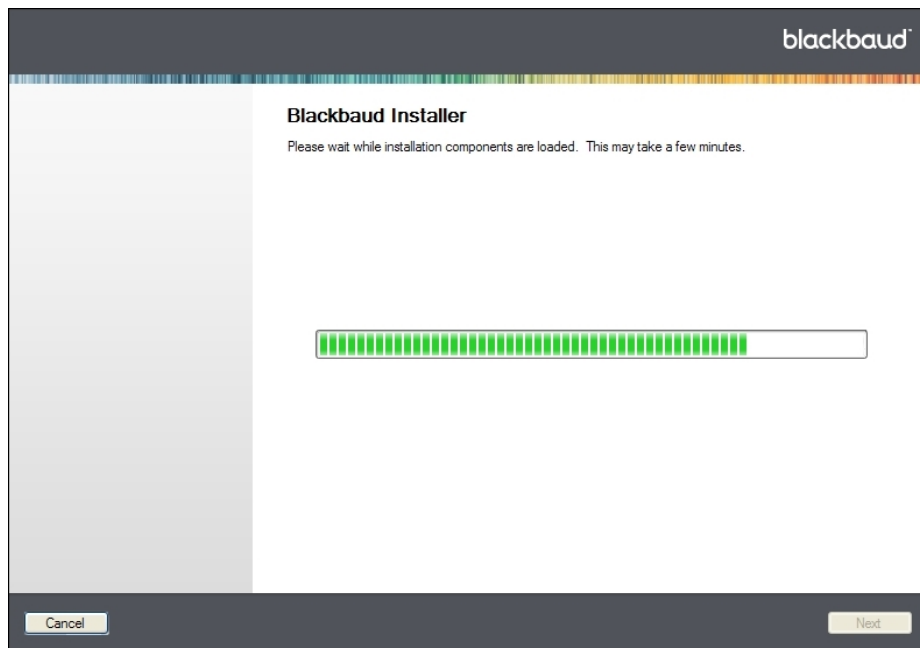
Note: The install name you entered in step appears at the top of the installer screens, so you can easily identify the installation.

When the process is complete, the Client Information screen appears.

4. In the **Site ID** field, enter the unique client ID you received from your Blackbaud account manager.

5. In the **Email Address** field, enter the email address associated with your Blackbaud account.

The Blackbaud Installer uses your site ID and email address to ensure the installation includes all features that your organization purchased.

Note: To request your site ID or email address, email solutions@blackbaud.com or call 1-800-443-9441.

6. Click **Next**. The Blackbaud Installer screen appears.
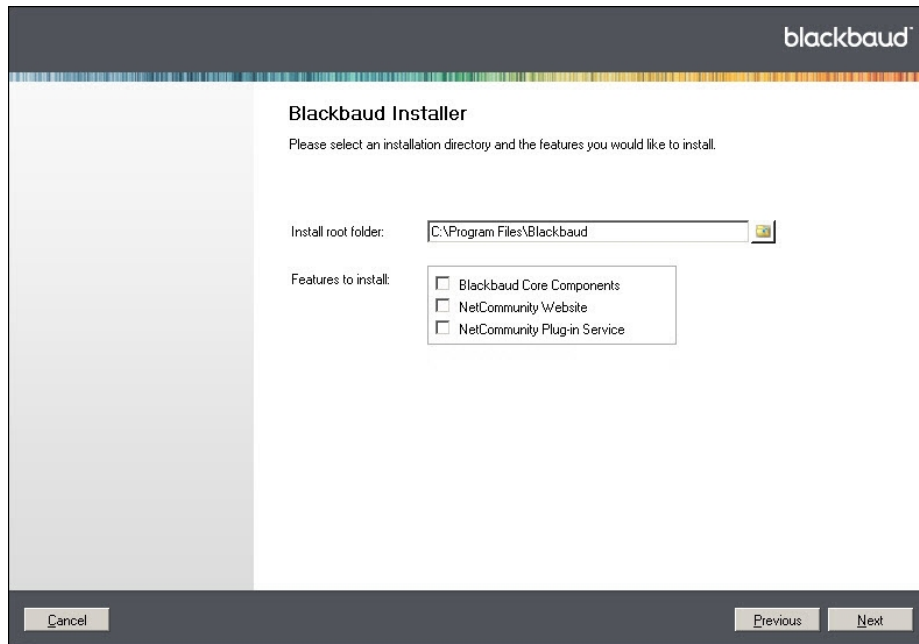
7. In the **Install root folder** field, enter the directory where you want to install the new Infinity instance.

Note: You must enter a new directory for the installation. You cannot install more than one instance in the same directory.

8. Select the features to install. Your selections determine which installation screens appear.

Note: Only Infinity products that are available for your organization appear in the **Features to install** box. For information about each feature, see Blackbaud Program Features on page 9.

9. Click **Next**.

10. To complete the installation, see Install Blackbaud Infinity features on page 24.

Warning: On the NetCommunity Website, Blackbaud Core Components, Plugin Service Website, and The Raiser's Edge Web Service installation task screens, you must enter a unique name in the **Virtual directory name** and the **External URL** fields. You cannot use a name or URL that you entered for another instance of the Infinity database on this server.

11. To exit the Blackbaud Installer, click **Close**.

Upgrade Multiple Instances on a Server

If you installed more than one Infinity instance on a server, you must select the instance to upgrade when you run the Blackbaud Installer.

> **Upgrade an Infinity database when multiple instances exist**

1. Double-click BlackbaudInstaller.exe. A progress screen appears.

   After the installation components load, the welcome screen appears.
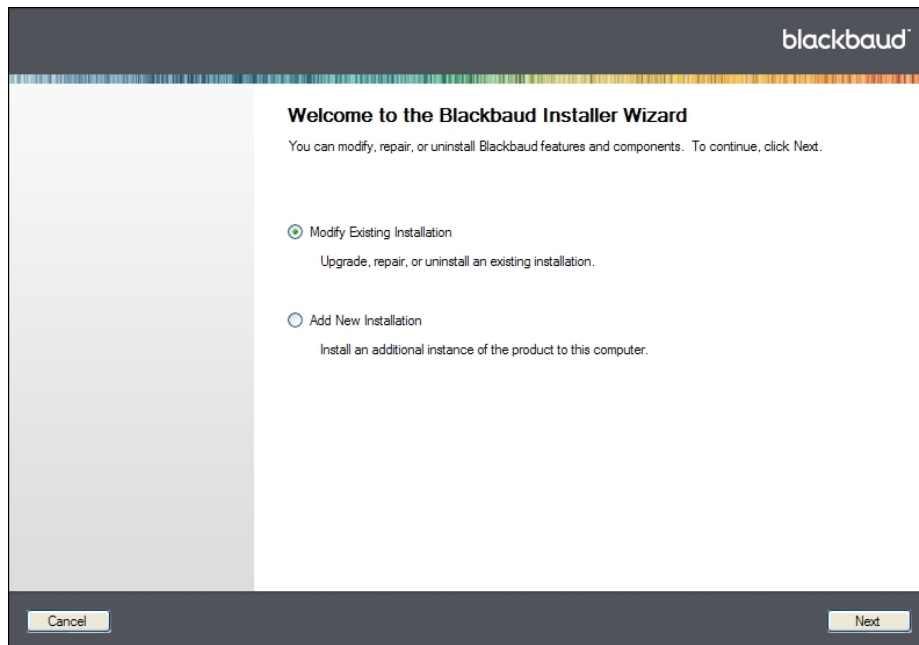
2. To upgrade your database, select **Modify Existing Installation**.
3. Click **Next**. The Select Installation screen appears.
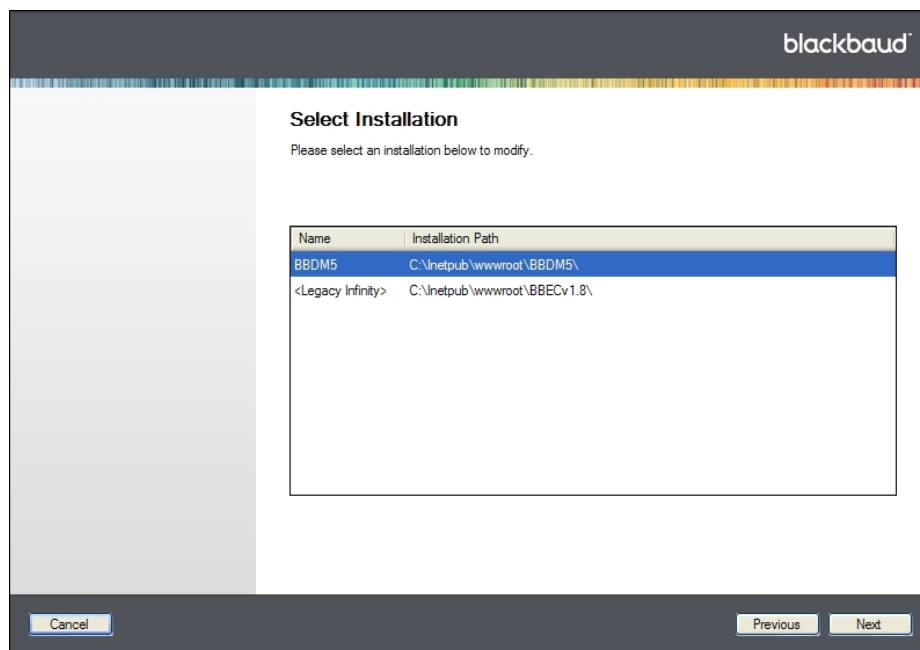
4. Select the instance of the installation to upgrade.

5. Click **Next**. The Confirmation screen appears.
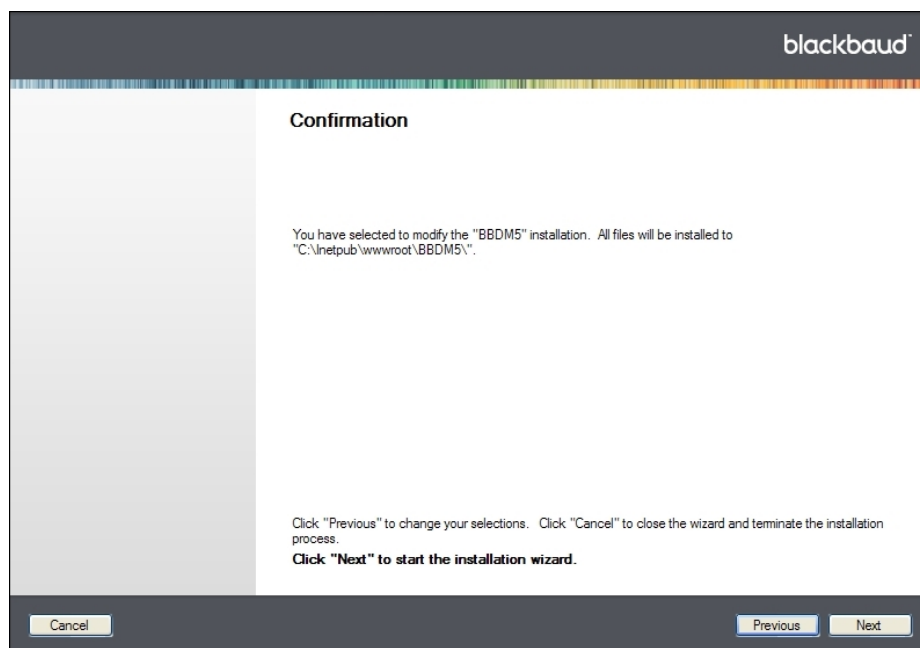
6. Click **Next**. A progress screen appears while the installation components load.
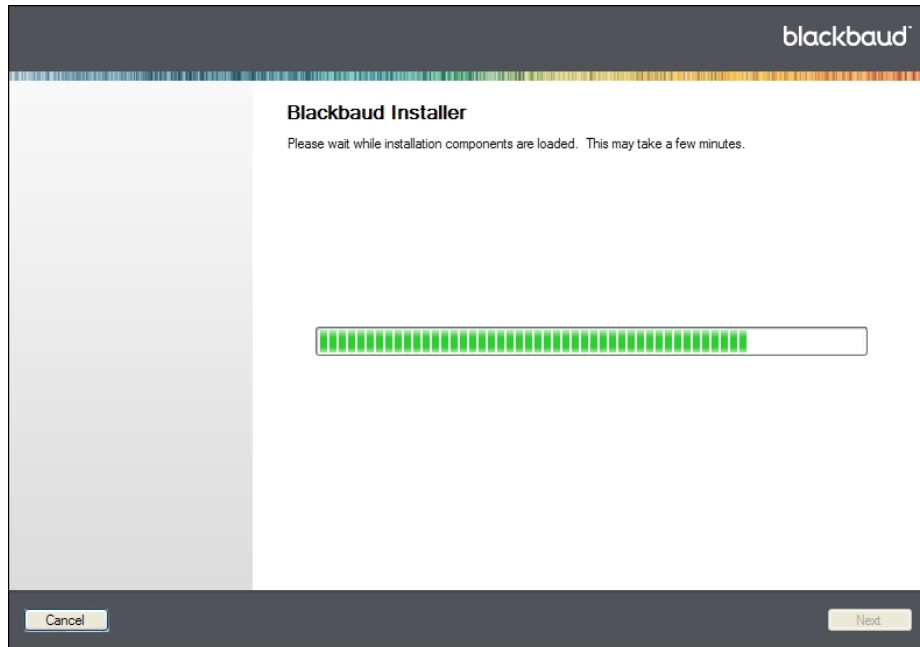
7. To complete the installation, see Install Blackbaud Infinity features on page 24.

8. To exit the Blackbaud Installer, click **Close**.

Skip Revisions

By default, the Blackbaud Installer runs revisions to update your database. It lists the database that it updates on the Confirmation screen. If you want to install without running revisions, you can enter a /SkipRevisions parameter in the Command Prompt before you run the Blackbaud Installer.

> **Install without running revisions**

1. Open the Command Prompt.
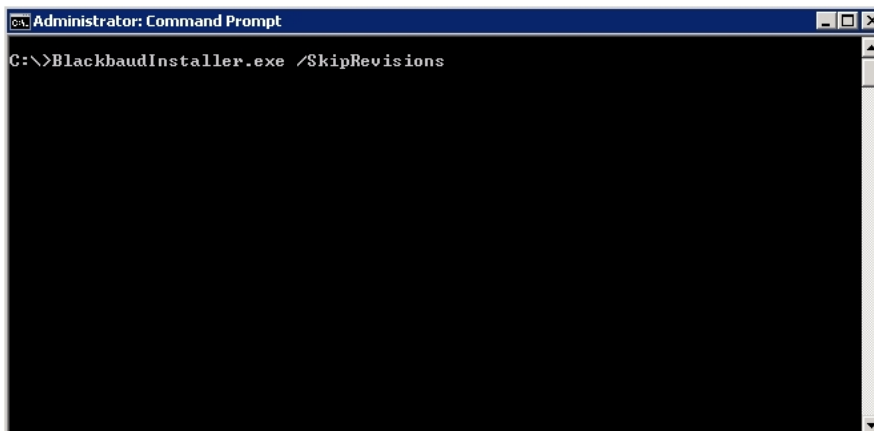
2. Enter the following command:

```
[path]\BlackbaudInstaller.exe /SkipRevisions
```

where "`[path]`" is the location where you saved the Blackbaud installation files.

3. Press **Enter** to run the command.

   To complete the installation, run the Blackbaud Installer. For instructions, see Install Blackbaud Infinity Features on page 23. When you reach the Confirmation screen, a message indicates that "The installer will NOT run revisions to update the database."

Install the NetCommunity Plug-in

If you have **The Raiser's Edge 7**, you use the plug-in only installation wizard to install the **The Education Edge** or **Blackbaud NetCommunity** plug-in on individual workstations.

You install the **Blackbaud NetCommunity** plug-in to download transactions from **Blackbaud NetCommunity** to **The Raiser's Edge**. You install **The Education Edge** plug-in to download transactions from **Blackbaud NetCommunity** to **The Education Edge**.

> **Install the NetCommunity plug-in on additional workstations**

1. Double-click PluginOnly.exe to start the installation. A progress screen appears.
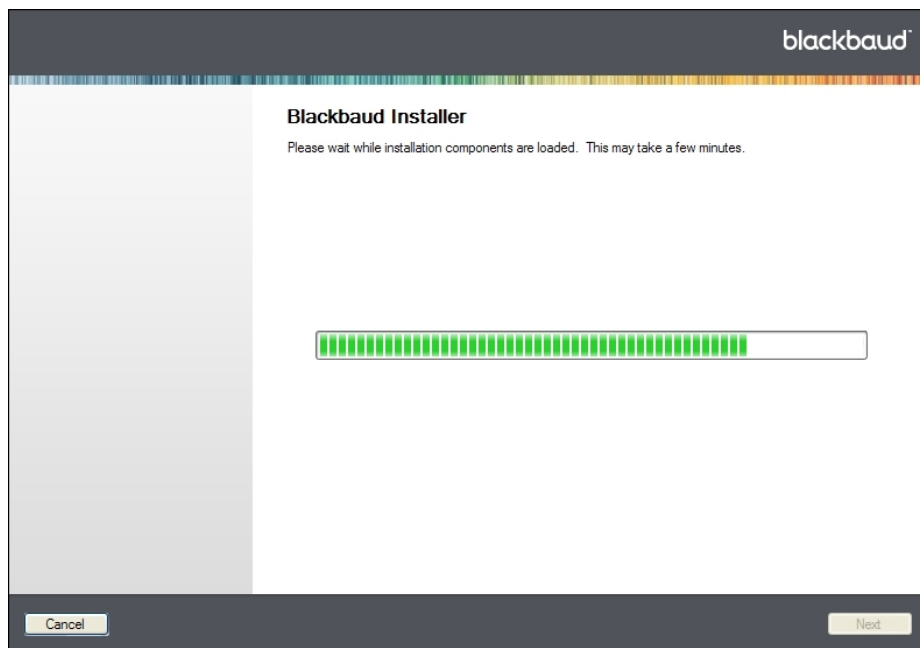
   After the installation components load, the Client Information screen appears.

2. The Confirmation screen appears. Your Blackbaud account determines which plugin the wizard installs.
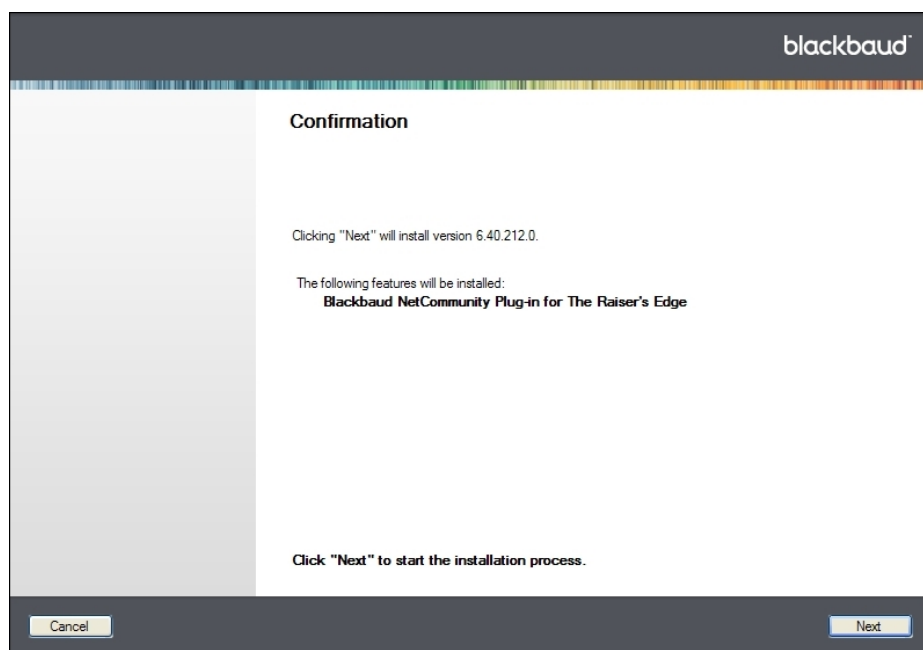
3. Click **Next**. The Installing Features screen appears.
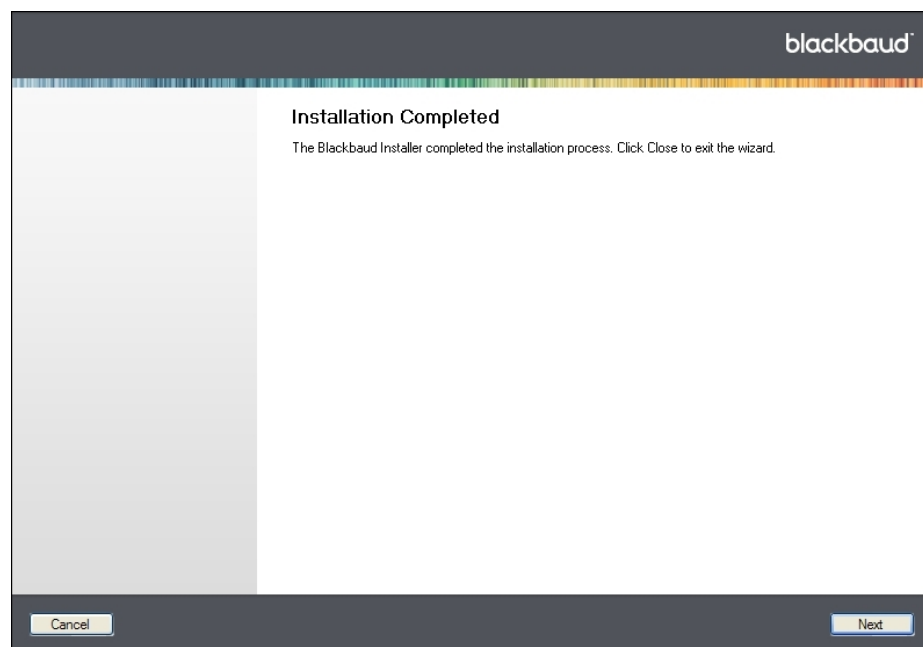
4. Click **Next**. The Installation Completed screen appears.
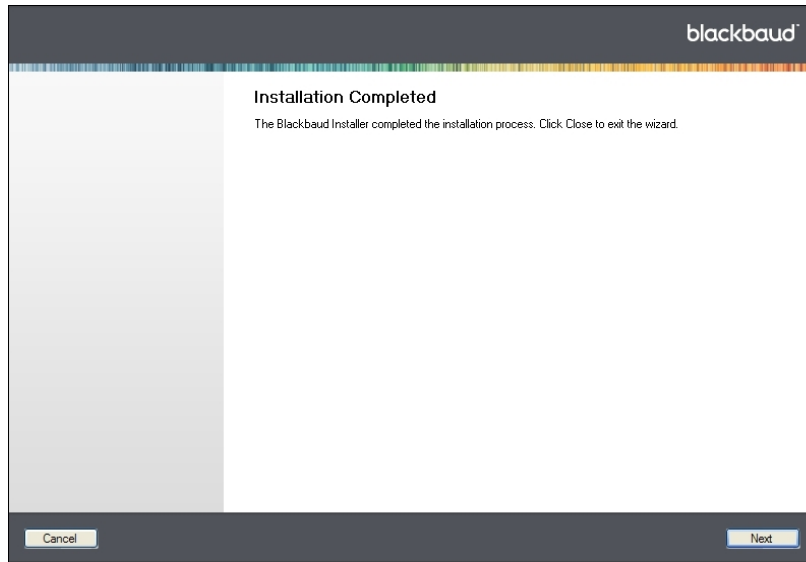
5. To exit the installation wizard, click **Close**.

Tip: After you install the ***Blackbaud NetCommunity*** plug-in, you should establish NetCommunity plug-in options in ***The Raiser's Edge***. For more information, see NetCommunity Plug-in Options on page 69.

Repair or Uninstall Blackbaud Features

You can use the Blackbaud Installer to repair your Blackbaud Infinity products and components or to uninstall features.

> **Repair or uninstall features**

1. Double-click BlackbaudInstaller.exe. A progress screen appears.

    After the installation components load, the welcome screen appears.
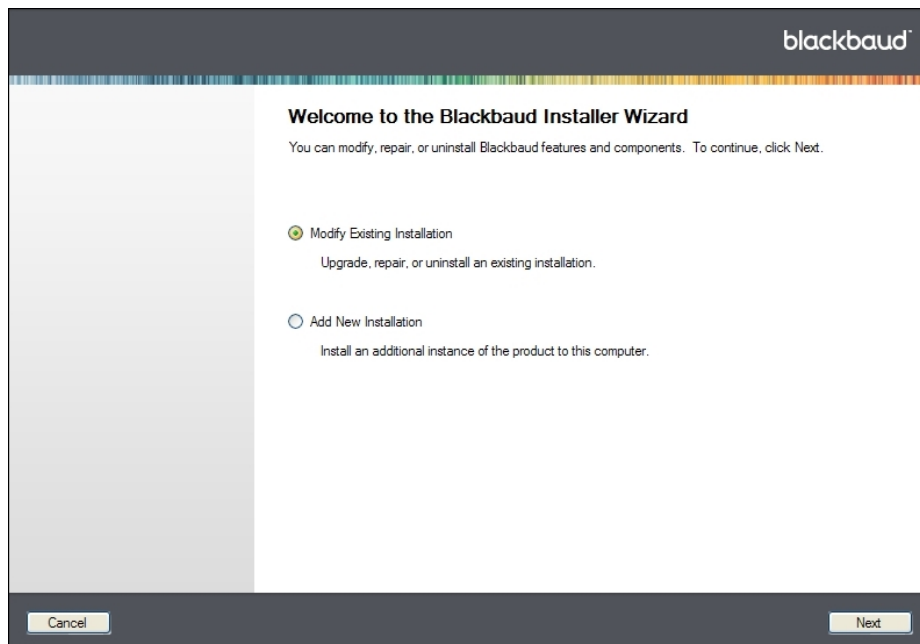
2. Select whether to update or uninstall Blackbaud Infinity features.

    • To repair existing features or uninstall selected features, select **Modify/Repair**. The Blackbaud Installer screen appears.

    • To uninstall all Blackbaud Infinity features, select **Uninstall**. This option deletes the virtual directory for your application and stops the indexing service. It also deletes the help files and the folder where you installed the application.

Tip: The **Uninstall** option does not delete the BBJobUser or proxy account in *SQL Server Integration Services*.

3. Click **Next**. When you select **Modify/Repair**, the Blackbaud Installer screen appears.
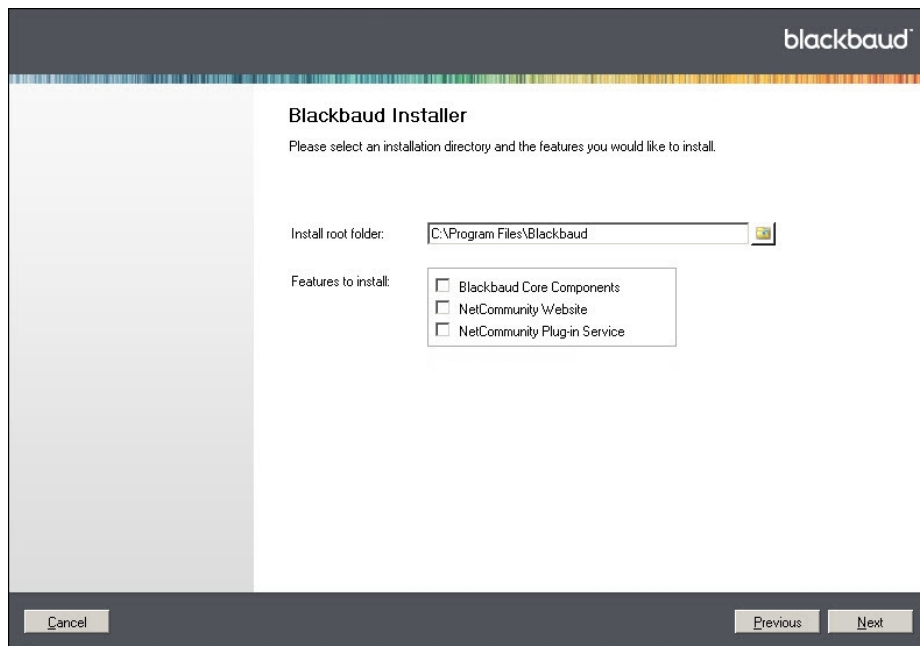
By default, the installer selects the currently installed features in the **Features to install** box. To install or uninstall features, select **Add or remove features**. To install a feature, select it in the **Features to install** box. To uninstall a feature, clear the checkbox.

Warning: Blackbaud Core Components includes services required by your Blackbaud online applications. You should only uninstall this feature if you plan to install it on another web server.

Note: If you did not install the Blackbaud Core Components the first time you ran the Blackbaud Installer, select **Add or remove features** and select **Blackbaud Core Components** from the **Features to install** box.

4. Click **Next**. The Installing Features screen appears.
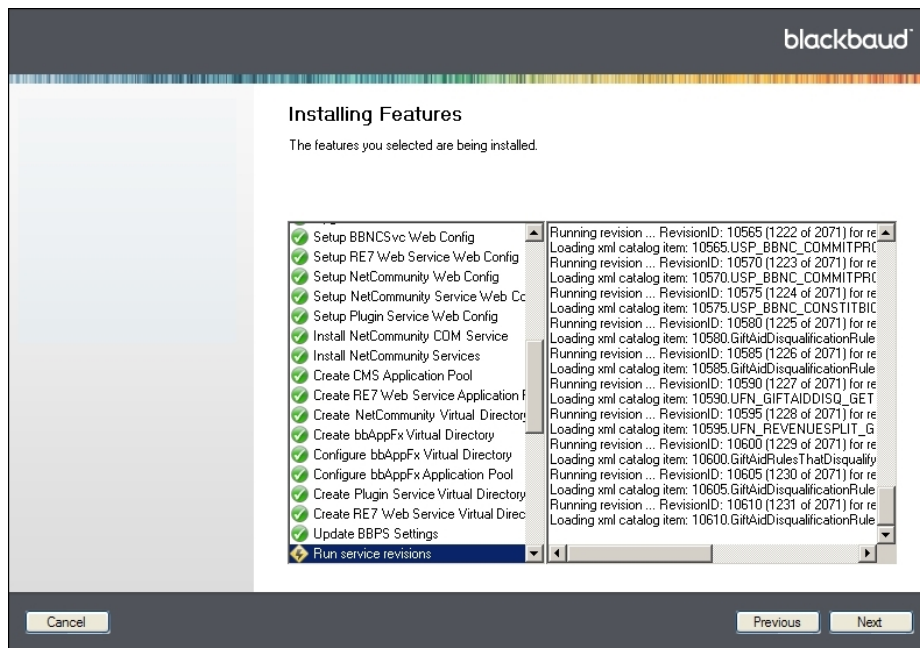
Note: If the process takes longer than four hours to complete, contact Blackbaud Support.

5. After the wizard installs the features, click **Next**. The Complete screen appears.
6. To exit the installer, click **Close**.

Post-installation

After you complete the installation or upgrade process, you can change settings and perform additional configuration tasks.

Configuration Tasks

You can perform the following tasks to verify your current settings are correct and to add functionality to the Blackbaud Infinity database.

□ Create a data warehouse— If you have **Blackbaud CRM** or **The Raiser's Edge** with **Blackbaud Direct Marketing**, you can use the Deploy Data Warehouse Installation Wizard to create a data warehouse as a record source in the application. For **Blackbaud CRM**, the data warehouse pulls records from *Fundraising* to conduct complex reporting and analysis. For **The Raiser's Edge** with **Blackbaud Direct Marketing**, the data warehouse pulls records from the database in **The Raiser's Edge**. For information about how to create a data warehouse, see .

□ To make sure regional dates and settings are correct, enter `<globalization culture="en-GB"/>` in your web.config file.

Blackbaud CRM Post-installation Tasks

The Blackbaud AppFx Configuration Manager acts as a front end for several MSBuild-based scripts. These scripts perform a number of **Application Server** management and setup tasks. The majority of these tasks occur during the installation or update process. However, you must perform some tasks after installation. For example, you must manually enable duplicate constituent reporting and merge functions or enable queue functionality with business processes. In addition, you can use the Configuration Manager to change the settings that you select during installation.

To access the Configuration Manager, go to the C:\bbappfx\MSBuild\ folder, where C:\bbappfx\ is your installation directory, and double-click the bbAppFx.Config.exe file. You can also access the Configuration Manager from the installation summary screen of the installation wizard.
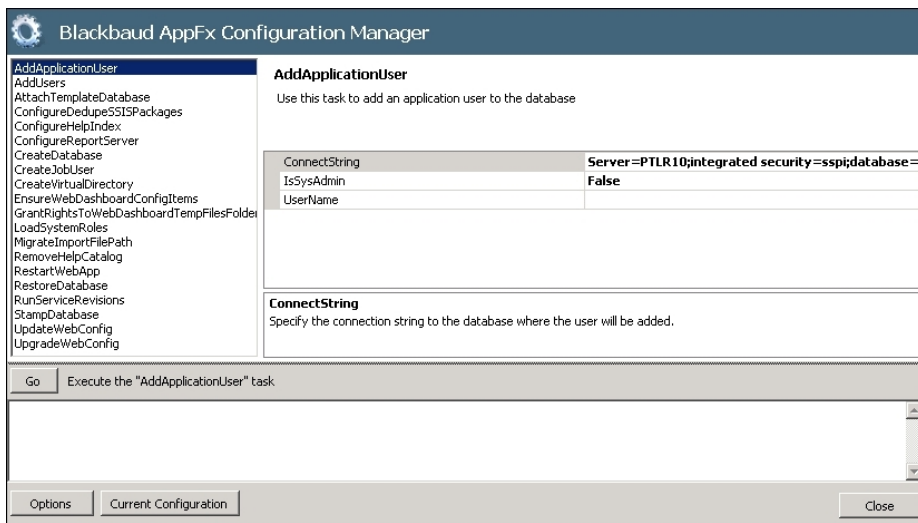
To execute a task in the Configuration Manager, select it in the list at the top left. Options for the task appear to the right of the list. Enter your settings and click **Go**.

Manually Run Database Revisions

1. Open the Blackbaud AppFx Configuration Manager. To access the Configuration Manager, go to the C:\bbappfx\MSBuild\ folder, where C:\bbappfx\ is your installation directory, and double-click the bbAppFx.Config.exe file. You can also access the Configuration Manager from the installation summary screen of the installation wizard.

2. Select RunServiceRevisions.

3. Ensure that the CatalogAssembliesPath is pointing to the correct bbappfx\vroot\bin directory.

4. Ensure that the SqlConnectString is set to update the correct database.

5. Click **Go**.

AddApplicationUser

This task adds an application user to the database.

Option	Description
ConnectString	Enter the connection string for the database where the user is added.
IsSysAdmin	Select whether to give the user system administrator rights. The default is False.
UserName	Enter the user name. You should use the Domain/User format.

AddUsers

This task adds the users and roles required by the program to access the database. For *Windows Server 2003*, the user is **NT AUTHORITY\NETWORK SERVICE**.

Option	Description
ConnectString	Enter the connection string for the database where the users are added.
Users	Enter the list of users for the web services.

AttachTemplateDatabase

This task attaches an existing database to the program. It attaches the full specified database--- (not a *.bak file) to the existing database, and copies it to the specified data path.

Option	Description
ConnectString	Enter the connection string for the *SQL Server* instance where the database is created.
DataPath	Enter the location to store the new data files on the *SQL Server* instance. If you do not enter a path, the default is used.
DBName	Enter the name of the database to create in *SQL Server*.
SourceDataPath	Enter the location of the source data files. The path must contain a valid database file named **BB_PRIM.MDF**.

ConfigureDedupeSSISPackages

This task does not occur during the installation process. To use a custom SQL Server Integration Services (SSIS) search package to identify constituents in the database, you must perform this task. For information about managing duplicate constituents, see the *Constituent Duplicates and Merge Tasks Guide*.

Option	Description
DatabaseName	Enter the name of the database that will have the dedupe packages loaded. This is typically the same database as the **Application Server**.
Packages	Enter the dedupe packages to configure.
PackageStoreSubFolder	Enter the subfolder where SQL Server Integration Services package files will be stored in the *SQL Server* file system.
SQLServer	Enter the name of the *SQL Server* instance that will load the dedupe package.

ConfigureHelpIndex

This task creates the help index catalog for the indexing service.

Option	Description
AlwaysRebuildCatalog	Select whether to delete and rebuild the help index catalog. The default is False.
CatalogName	Enter the name of the catalog that the indexing service creates.
CatalogPath	Enter the path to the catalog that the indexing service creates. This is the location where the catalog is stored, not the location of the files to be indexed. If you do not enter a path, the default value of SearchPath is used.
ComputerName	Enter the name of the machine where the indexing service is configured. You only need the name if you configure the indexing service on a remote machine. Otherwise, the default is the server where the task is executed.
DeployPath	Enter the path to the deploy folder on the Web Server that stores the help files. The help system assumes the vroot folder has a Help subfolder. Typically, this argument maps to the $(Platform_DeployPath) or $(Platform_Help_Location) properties. The task adds "\help" to deploy folder if it is not already there.

ConfigureReportServer

This task configures the *SQL Report Server* for use with the ***Application Server***.

Option	Description
CreateInternalUser	Select whether to create a user account on the *SQL Report Server* and the ***Application Server*** to connect to the program's database. If not, you must enter an existing user name and password in the **ReportServerUser** and **ReportUserPassword** fields.
Database	Enter the name of the application database on the ***Application Server***.
DatabaseServer	Enter the *SQL Server* instance for the application database.
DeployUser	Enter a user name for the Microsoft Windows user account to manage the *Microsoft Reporting Services* instance.
DeployUserPassword	Enter a a password for the Microsoft Windows user account to manage the *Microsoft Reporting Services* instance.
ReportFolder	Enter the name of the Report folder. Typically, this is the same as the name of the ***Application Server*** database.
ReportRootFolders	Enter a list of RootFolderItems to determine the folders to display in the application's report explorer.

Option	Description
ReportServiceUser	Enter a user name on the *SQL Report Server* and the **Application Server** to connect to the program's database. If you select "False" in the **CreateInternalUser** field, this field is required.
ReportServiceHost	Enter the name of the machine that runs the Windows Service component for the *Microsoft Report Services* instance.
ReportServiceURL	Enter the URL for the *SQL Report Server* instance that runs the Web Service component.
ReportUserPassword	Enter a password for the user account on the *SQL Report Server* and the **Application Server** to connect to the program's database. If you select "False" in the **CreateInternalUser** field, this field is required.

CreateDatabase

This task creates a database on the **Application Server**.

Option	Description
ConnectString	Enter the connection string for the *SQL Server* instance where the database is created.
DataPath	Enter the location to store the new data files on the *SQL Server* instance. If you do not enter a path, the default is used.
DBName	Enter the name of the database to create in *SQL Server*.
LogPath	Enter the location of the log files on the *SQL Server* instance. If you do not enter a path, the default is used.
OverWriteExistingDB	Select whether to overwrite the existing application database. If you select "True," the task closes all connections to the database on the *SQL Server* instance and drops the database.

CreateJobUser

This task adds "BBJobUser" to the Web Server and *SQL Server*. BBJobUser is used to schedule *SQL Server Agent* jobs for business processes. This enables queue functionality for business processes in the program. For information about how to manage queues, see the *Administration Guide*.

Note: If your database server and web server are in separate domains, you may need to set up the BBJobUser manually. To do this, you create a local Windows account on both the SQL Server and the web server.

This task does not add the user to the program. To schedule business processes and run them with the queue functionality, you must add the BBJobUser to the program as an application user and assign rights to the business processes you want to perform and to the record types those business processes affect. We recommend you assign the administrator role to this user to bypass security checks.

Option	Description
AlwaysRecreate	Select whether to re-create the BBJobUser on the Web Server and *SQL Server*. This also re-creates the entry in sys.credentials for BBJobUser to synchronize the password.
ProxyAccountPrincipal	Enter the SQL account with access to the proxy account. You can enter this as a string or an itemList. Typically, you enter it in "@(User)" format.
SQLConnectString	Enter the connection string for the *SQL Server* instance where the database is located. Usually, the $(Platform_SQLServerConnect) property works.
WebServerHost	Enter the name of the Web Server. If no value is entered, BBJobUser is not created on the Web Server.

CreateVirtualDirectory

This task creates the virtual directory information in *Internet Information Services* that is required by the **Application Server**.

Option	Description
AnonymousAccessDirectories	Enter a list of subdirectories that should allow anonymous access.
EnableDynamicHTTPCompression	Select whether to enable HTTP compression for dynamic files such as *.aspx and *.asmx. If you select "True," the Web Server will compress dynamic files on demand.
EnableStaticHTTPCompression	Select whether to enable HTTP compression for static files. If you select "True," download times improve for the component files.
EnableStaticHTTPCompressionForClientBin	Select whether to enable HTTP compression for the client bin folder. Only enable this if your client computers use *Internet Explorer 7* or higher.
MachineName	Enter the name of the Web Server where the task creates the virtual directory.
OverwriteExistingDirectory	Select whether to delete an existing virtual directory with the same name. If you select "False" and a virtual directory exists with the same name, the task does not create a virtual directory.
PhysicalPath	Enter the location on the Web Server for the new virtual directory.
RootSubPath	Enter the root subpath for the virtual directory. If you do not enter a subpath, the task creates the virtual directory on the root of the default website. The default root subpath is "/W3SVC/Root."
VirtualDirName	Enter the name of the virtual directory.

EnsureWebDashboardConfigItems

This task ensures that the web.config file contains the required features for the web dashboard feature.

Option	Description
WebConfigFile	Enter the URL to the web.config file.

LoadSystemRoles

This task does not occur during the installation process. To load pre-built system roles into the program from a specified folder, you must perform this task. For information about managing, creating, importing, and exporting system roles, see the *Administration Guide*.

Option	Description
RoleDefinitionFiles	Enter the path to the role definition XML files.
WebServiceDatabaseName	Enter the database name that appears in the select database prompt of the application login screen.
WebServiceUrl	Enter the service URL for the **Application Server**. This is the URL for the *.asmx file. The URL likely uses the format "http://[Server name]/[Virtual directory name]/AppFxWebService.asmx.

MigrateImportPathFile

This task applies the ImportFilePath setting in the web.config file to the IMPORTPROCESSOPTIONS table in the Application Server database.

Option	Description
SQLConnectString	Enter the connection string for the database.
WebConfigFile	Enter the URL to the web.config file.

RestartWebApp

This task restarts the web application. This recycles the application pool for the virtual directory or resets *Internet Information Services*.

Option	Description
MachineName	Enter the name of the machine to restart.
RootSubPath	Enter the root subpath for the virtual directory. The default root subpath is "/W3SVC/Root."
VirtualDirName	Enter the name of the virtual directory for the web application.

RestoreDatabase

This task does not occur during the installation process. To restore a backup database (*.bak), you must perform this task. You can choose to overwrite the existing database and replace it with the backup copy.

Option	Description
BackupFile	Enter the name of the *.bak file. The backup database file and path must be on the *SQL Server* instance where the database is restored.
ConnectString	Enter the connection string for the *SQL Server* instance where the database is restored.
DatabaseName	Enter the name of the database to restore on the *SQL Server* instance.
DataPath	Enter the location to restore the data files on the *SQL Server* instance. If you do not enter a path, the default is used.
LogPath	Enter the location to restore the log files on the *SQL Server* instance. If you do not enter a path, the default is used.
OverWriteExistingDB	Select whether to overwrite an existing database with the same name on the *SQL Server* instance. If you select "True" and a database with the same name exists, the task closes all existing connections and drops the database. If you select "False" and a database with the same name exists, the task fails with a standard SQL exception.

RunServiceRevisions

This task uploads CLR assemblies to the database and runs service revisions. This task usually occurs when you install the software with a new database or update an installation.

Option	Description
CatalogAssembliesPath	Enter the location of the catalog assemblies. If the **RevisionsAssemblies** field includes LoadSpec revisions that reference catalog assemblies, then this path is required.

Option	Description
RevisionsAssemblies	Enter an ordered list of task items with specs to identify assemblies with revisions to run. For items with metadata names like **REVISION#** (where # is an integer, starting at 1), revisions can be loaded in the order indicated by the metadata (depending on the **REVISIONSENUMERATIONMODE**). If an item does not have metadata, all revisions are run, starting with revision 1.
SqlClrAssemblies	Enter an ordered list of assemblies. Each assembly must contain an embedded resource that conforms to the appropriate schema.
SqlConnectString	Enter the connection string for the Infinity database.

StampDatabase

This task updates the web.config file. Run this task after you upgrade to the Infinity platform for the first time.

Option	Description
EmailAddress	Enter the email address associated with your Blackbaud account. This is the email address you entered on the Client Information screen in the Blackbaud Installer. For more information, see Install Blackbaud Infinity Features on page 23.
SiteId	Enter the unique client ID you received from your Blackbaud account manager. This is the ID you entered on the Client Information screen in the Blackbaud Installer.
SqlConnectString	Verify that the task includes the new location of your Infinity database.
UpdateProductList	Select "True" to update the database so all features and products you own appear.

UpdateWebConfig

This task updates the web.config file. If you change the server setup, you should perform this task.

Option	Description
ConnectionString	The connection string for the *SQL Server* database where the database is located. Usually, the $(Platform_SQLServerConnect) property works. The string is associated with the entry in the **REDBListEntry** field. If you enter a value in the **REDBListEntry** field and leave this field blank, the task fails with a standard SQL exception.
HelpSearchCatalog	Enter the name of the help search catalog.
ImportFilePath	Enter the location of the files to import. This overwrites the web.config file.

Option	Description
OutputFile	Enter the location of the updated web.config file. If you do not enter a new location, the task overwrites the existing web.config file.
REDBListEntry	Enter the database name that appears in the select database prompt of the application login screen. Usually, the $(Platform_SelectedDatabase) property works. If you enter a value in this field and leave the **ConnectionString** field blank, the task fails with a standard SQL exception.
ReplaceREDBListEntry	Select whether to remove all entries under connectionStrings in the web.config file and create an entry for the database.
WebConfigFile	Enter the location of the web.config to modify. You can enter a file, UNC path, or the virtual directory of the web server.

Update Virtual Directory and Database Settings

To change the virtual directory name, database server, or database name in the Blackbaud AppFx Configuration Manager, click **Options**. The Configuration Settings screen appears. On this screen, you can update the values as necessary.
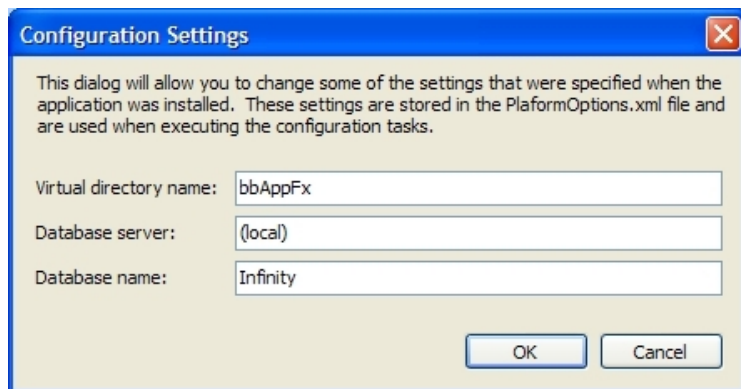
To view your configuration settings, click **Current Configuration**. The settings appear in the box at the bottom of the screen and a prompt appears to determine if you want to view the installation log file.

Blackbaud Data Warehouse Deployment Wizard

You can create a standard data warehouse with the Blackbaud Data Warehouse Deployment Wizard. The data warehouse copies records from the selected data source to a data warehouse so you can conduct complex reporting and analysis. To access the deployment wizard, open the \MSBuild\Datamarts folder in the installation directory and run the deploy.vbs file.

Note: When you upgrade or patch the program, you must run the deployment wizard again to update the SSIS package for the data warehouse and run revisions against the *Analysis Services* database.

Users with **The Raiser's Edge** can create a standard data warehouse with records from their database for **The Raiser's Edge**. Users with **Blackbaud CRM** can create a data warehouse with records from *Fundraising*.

After you create the data warehouse, options appear in the program to manage the Extract, Transform, and Load (ETL) process. The ETL process extracts records from the source database, transforms them for optimal loading and reporting, and loads them in the data warehouse. From *Administration*, you can access the Reporting data warehouse page to monitor ETL activity, schedule business processes to coincide with the ETL process, and manually start an ETL refresh. Users with **The Raiser's Edge** can also configure and monitor the ETL process.

In the program, the data warehouse appears as a record source in *Administration*, and three smart fields appear for the data warehouse. From the Data Warehouses page in *Administration*, you manage the data warehouse and the ETL process. In *Marketing and Communications* and *Analysis*, you can access the record source to create queries.

Note: For users with **The Raiser's Edge**, the Infinity Platform SDK includes the Blackbaud Data Warehouse for The Raiser's Edge Database Reference with a comprehensive list of the database objects in the data warehouse. To access this reference guide, open the \SDK\Documentation folder where you installed the SDK. In the folder, open the .chm file for the version of the program you installed.

In **Blackbaud CRM**, the deployment wizard also creates an OLAP cube to conduct complex reporting and analysis on the data in the data warehouse. The cube increases your ability to manipulate data from the source database, and it allows you to perform advanced reporting. With the OLAP Explorer, you can build pivot tables and charts based on the OLAP cube. The program also includes Microsoft *Excel* report templates so you can use subsets of the data in the OLAP cube to create reports in *Excel*.

Warning: To ensure that *Fundraising* data in the OLAP cube is accurate and up-to-date, do not disable audits on the source tables. The OLAP cube relies on audit tables to determine when you delete data in the source database. If you disable audits, the OLAP cube does not reflect deletions in the source tables and the data in the cube becomes outdated.

Deploy the standard data warehouse

1. Run the Blackbaud Data Warehouse Deployment Wizard that is available in the \MSBuild\Datamarts\bin folder in your installation directory.

    - To deploy from your web server, open the \MSBuild\Datamarts\bin folder in your installation directory and run the Blackbaud.AppFx.ReportDB.Installer application file as an administrator. For example, if C:\bbappfx\ is your installation directory, go to C:\bbappfx\MSBuild\Datamarts\bin, then right-click Blackbaud.AppFx.ReportDB.Installer and select **Run as administrator** from the dropdown menu.

    - To deploy from the database server, copy the \bbappfx\MSBuild\Datamarts folder to the database server from the installation directory on the web server, and then run the Blackbaud.AppFx.ReportDB.Installer application file as an administrator. For example, if you copy the \bbappfx\MSBuild\Datamarts folder to C:\Deploy\, go to C:\Deploy\MSBuild\Datamarts\bin, then right-click Blackbaud.AppFx.ReportDB.Installer and select **Run as administrator** from the dropdown menu.

Warning: Some actions performed by the installer require administrative access, so the deployment may fail if you run Blackbaud.AppFx.ReportDB.Installer as a standard user. We recommend that you run the installer as an administrator.

2. On the Data Warehouse tab, enter information about the data warehouse.

   - In the **Deployment folder** field, a link appears to the folder that the data warehouse deploys from. Make sure this points to the \bbappfx\MSBuild\Datamarts folder in your installation directory. If it does not, click the link and on the Browse For Folder screen, select the \bbappfx\MSBuild\Datamarts folder in your installation directory.

   - In the **Data warehouse** field, select a data warehouse to deploy. Select "BBDW" for the *Blackbaud CRM* warehouse, or select "Blackbaud Data Warehouse for The Raiser's Edge" for *The Raiser's Edge* warehouse.

   - In the **Manifest file** field, the location of the manifest file appears. This XML file contains metadata about the data warehouse installation.

3. On the Web Service tab, enter information about the application.

   - In the **Web service url** field, enter the URL for the application web server. This is the virtual directory for the web application. Generally, the format is "http://[Server name]/ [Virtual directory name]."

   - In the **Database** field, select the database key. This is the value that you select in the database prompt of the application login screen. It may be the same as the database name, but it is not necessarily the same. You define the database key in Web.config file in the installation directory's vroot folder. Within the Web.config file, you can provide a semicolon-separated list of database keys to present on the login screen within the DBList or REDBList AppSettings.

4. On the Application Database tab, enter information about the application's database.

   - In the **SQL Server** field, enter the SQL Server instance for the application.

   - In the **Database** field, enter the name of the application database.

5. On the OLTP Database tab, enter information about the transactional database.

   Note: You only enter data on the OLTP Database tab when you deploy the data warehouse for *The Raiser's Edge*. For *Blackbaud CRM*, the application database and the transactional database are the same, so the fields on this tab inherit their values from the corresponding fields on the Application Database tab.

   - In the **SQL Server** field, enter the SQL Server instance for the source database.

   - In the **Database** field, enter the name of the source database.

6. On the Report Database tab, information appears about the ETL process that creates and updates records in the data warehouse.

   Note: You only enter data on the Report Database tab when you deploy the data warehouse for *Blackbaud CRM*. For *The Raiser's Edge*, the application database and the data warehouse database are the same, so the **SQL Server** and **Database** fields inherit their values from the corresponding fields on the Application Database tab and you cannot edit them. And since the

OLAP cube is not available for *The Raiser's Edge*, the **OLAP Server** and **OLAP Database** fields do not appear.

- In the **SQL Server** field, enter the SQL Server instance for the data warehouse database.
- In the **Database** field, the name appears for the database that contains the data warehouse tables. You cannot edit this name.
- In the **OLAP Server** field, enter the SQL Server instance for the OLAP database.
- In the **OLAP Database** field, the name appears for the database that contains the OLAP cubes for the data warehouse. You cannot edit this name.

Note: If you set the **Deploy OLAP cube** setting to "False" under **Deployment Options** on the Edit Advanced Data Warehouse Setting screen, the **OLAP Server** and **OLAP Database** fields do not appear.

7. On the User Account tab, enter credentials for a *Microsoft Windows* user account that will access the application database and the data warehouse database and run the ETL process. You can enter a domain account or a local machine account.

- In the **Account name** field, enter a user account. If the account does not have rights to communicate between the application and the data warehouse's source, the deployment wizard will grant the necessary rights. If you enter a local machine user account that does not exist, the deployment wizard will create it.
- In the **Password** field, enter the password for the user account. The deployment wizard does not save this password. If you redeploy the data warehouse, you must re-enter the password.

   Tip: If you change this password after you deploy the data warehouse, the application cannot access the data warehouse and the ETL process and any process that relies on data from the warehouse will fail. To restore access to the data warehouse, you must return to the deployment wizard, enter the new password, and then deploy the warehouse again.

- If you use a local machine user account, a **Synchronize local machine accounts on these computers** box appears. Enter a comma-separated list of the computers where you want to synchronize the account name and password. For example, enter the names of the application server and web server.

8. To edit additional settings, click **Edit advanced settings**. The Edit Advanced Data Warehouse Settings screen appears.

This screen includes all the settings from the deployment wizard as well as additional advanced settings. Some of the more commonly used settings include:

- The **Deploy OLAP cube** setting under **Deployment Options** allows you control whether to deploy the OLAP cube. If you don't plan to use the cube, you can set the property to "False" to improve the performance of the ETL process and remove the need for Analysis Server.
- The **Max ETL Parellelism** setting under **Deployment Options** allows you to run up to 4 ETL packages at the same time. By running multiple ETL packages concurrently, the ETL process runs much faster. However, this is resource-intensive and uses more CPU,

memory, and disk resources. To speed up the ETL process, you can increase the number for this setting, but if the ETL process runs simultaneously with many other processes, you may want to set a lower number for this setting. For more information about how to use the Max ETL Parellelism setting to optimize ETL performance, see the related blog post on Blackbaud Developer Network.

- The **Include Selections** setting under **Deployment Options** allows you to select whether to include static selections from the Infinity database in the warehouse. When you include static selections, you can then filter your data warehouse query views against these static selections.

For a detailed description of the settings on this screen, see Edit Advanced Data Warehouse Settings Screen.

9. On the Deploy tab, click **Deploy** to deploy the data warehouse. The deployment begins, and a status log appears.

A log file that describes installation activity is created regardless of whether errors occur. You can find the installation log file in the \Local Settings\Temp folder for the user who installs the data warehouse. For example, if the administrator installs the data warehouse, the log is created in the C:\Documents and Settings\Administrator\Local Settings\Temp folder.

Edit Advanced Data Warehouse Settings Screen

On the Edit Advanced Data Warehouse Settings screen, you can edit the settings from the deployment wizard and also edit additional advanced settings. All the settings that appear in the deployment wizard are also included on this screen alongside additional advanced settings. Some of the settings on this screen are for informational purposes only. You can use the screen to view those settings, but you cannot edit them.

Application web service

The settings in this section relate to the application's web service. The first two settings correspond to the fields on the deployment wizard's Web Service tab.

Screen Item	Description
Application root url	Enter the URL for the application web server. This is the virtual directory for the web application. Generally, the format is "http://[Server name]/[Virtual directory name]."
Application web service database key	Enter the database name that appears in the select database prompt of the application login screen
Hosted SiteInfoID	When running this utility in a hosted environment, specify the HostedSiteID in order to retrieve the list of databases associated with a site.
Validate application root url	Select whether to validate the URL for the application web server in the Application root url field.
Web Service Password	Enter the password for the Web Service User.

Screen Item	Description
Web Service User Name	Enter the user name to use when connecting to the web service. This is required if the virtual directory is configured for Basic Authentication.

Database connection: Application

The settings in this section relate to the application's database. These settings correspond to the fields on the deployment wizard's Application Database tab.

Screen Item	Description
(Application SQL Server instance)	Enter the SQL Server instance for the application database.
Application database	Enter the name of the application database.

Database connection: OLTP System

The settings in this section relate to the application's database. These settings correspond to the fields on the deployment wizard's OLTP Database tab.

Note: These settings only appear when you select "Blackbaud Data Warehouse for the Raiser's Edge" in the **Data warehouse** field on the deployment wizard's Data Warehouse tab.

Screen Item	Description
OLTP SQL Server database	For users with *The Raiser's Edge*, enter the name of the source database for *The Raiser's Edge*.
OLTP SQL Server instance	For users with *The Raiser's Edge*, enter the SQL Server instance for the source database.

Database connection: OLAP Reporting Database

The settings in this section relate to the database for the OLAP cube. These settings correspond to the **OLAP Server** and **OLAP Database** fields on the deployment wizard's Report Database tab.

Note: These settings only appear when you select you "BBDW" in the **Data warehouse** field on the deployment wizard's Data Warehouse tab.

Screen Item	Description
Analysis Services database	For users with *Blackbaud CRM*, enter the name of the database for the OLAP cube.

Screen Item	Description
Analysis Services instance	For users with **Blackbaud CRM**, enter the SQL Server instance for the OLAP database.

Database connection: Relational Reporting Database

The settings in this section relate to the database for the data warehouse. These settings correspond to the **SQL Server** and **Database** fields on the deployment wizard's Report Database tab.

Note: These settings only appear when you select you "BBDW" in the **Data warehouse** field on the deployment wizard's Data Warehouse tab.

Screen Item	Description
Report mart database	For users with **Blackbaud CRM**, enter the name of the database for the data warehouse.
Report mart SQL Server instance	For users with **Blackbaud CRM**, enter the SQL Server instance for the data warehouse.

Deployment file

The settings in this section relate to installation settings for the data warehouse. The second setting corresponds to **Manifest file** field on the deployment wizard's Data Warehouse tab, while the values for the other four settings are determined by your selection in the **Data warehouse** field on the Data Warehouse tab.

Screen Item	Description
Mart key	The data warehouse uses the same database as the application, and the data warehouse key distinguishes data warehouse files from other files in the database. This key appears at the beginning of tables, stored procedures, and other items in the SQL Server schema.
Mart manifest file	Enter the location of the manifest file. This is an XML file with metadata about the data warehouse installation that determines the information in the other fields under **Deployment file**. The deployment folder from the Data Warehouse tab contains the manifest file.
Mart name	This field displays the data warehouse type as it appears in the application.
OLTP Database Location	This field displays the location of the source database relative to the application database.
Report Database Location	This field displays the location of the report database relative to the application database.

Deployment Options

The settings in this section relate to deployment settings for the data warehouse.

Screen Item	Description
Configure data warehouse after deployment	For users with **Blackbaud CRM**, select whether to run configuration tasks after deployment. If you set this option to False, the deployment wizard will not populate the record source fields in the application.
Create Database Synonyms	Select whether to create SQL Server synonyms for database objects. If you set this option to False, the deployment wizard will not be able to communicate between different SQL Server instances.
Create Report Services OLAP Data Source	For users with **Blackbaud CRM**, select whether to create a Report Services data source for the OLAP database.
Deploy catalog items	Select whether to load catalog packages included with the data warehouse deployment files. If you set this option to False, the deployment wizard will not install the files to make fields in the data warehouse available in the application.
Deploy Large UDM Dimensions	True if the deployment needs to change the caching options for very large dimensions and disable drillthroughs. This setting is needed if there will be dimensions with more than 10 million records.
Deploy OLAP cube	Select whether to create the OLAP cube on the specified Analysis Services instance.
Enable ETL job start from shell	Select whether to register ETL job information to allow you to start the ETL process in the application. If you set this option to False, you must start the ETL process from SQL Server.
Grant file and folder rights for SQLAgent SSIS job	Select whether to grant read rights to the SSIS packages. If you set this option to False, you must grant permissions to the SSIS packages manually for the ETL process.
Include Selections	Select whether to synchronize static selections with the data warehouse for use in queries.
Max ETL Parallelism	Enter the maximum number of SSIS packages to run in parallel.
Register data warehouse in application	Select whether to include the data warehouse on the Data Warehouse page in the application. From this page, you manage the ETL process. If you set this option to False, you must manage the ETL process from SQL Server.

Extensibility

The setting in this section relates to extensions to the warehouse.

Screen Item	Description
OLAP Extensions Path	Optional. The path to the extend folder containing extension to the warehouse, ETL process and the cube.

OLAP deployment

The setting in this section relates to deployment settings for the OLAP cube.

Note: These settings only appear when you select you "BBDW" in the **Data warehouse** field on the deployment wizard's Data Warehouse tab.

Screen Item	Description
Analysis Services deployment utility	For users with *Blackbaud CRM* only, enter the path to the command line utility for the deployment of the OLAP database.

Report database paths

The settings in this section relate to optional settings for the report database.

Screen Item	Description
Report database data path	Enter the location to store the data files for the report database. If you do not enter a path, the default is the SQL Server data folder.
Report database log path	For users with *Blackbaud CRM* only, enter the location to store the log files for the report database. If you do not enter a path, the default is the SQL Server data folder.

Security

The settings in this section relate to the account credentials to use for the ETL process. The settings in this section correspond to the fields on the deployment wizard's User Account tab.

Screen Item	Description
Local account Machine list	For users with *The Raiser's Edge*, if you use a local machine user account to communicate between the application and the data warehouse's source, enter a list of the computers where you want to synchronize the account credentials.
Reset Trusted Account Password	For users with *The Raiser's Edge*, if you use a local machine user account, select whether to reset the password to the value in the **Trusted Account Password** field.
Trusted Account Is Local User	This field indicates whether you use a local machine user account or a domain account.

Screen Item	Description
Trusted Account Password	Enter a password for the Microsoft Windows user account. The deployment wizard does not save this password. To redeploy the data warehouse, you must re-enter the password.
Trusted Account User Name	Enter a Microsoft Windows user account. If the account does not have rights to communicate between the application and the data warehouse's source, the deployment wizard will grant the necessary rights. If you enter a local machine user account, the deployment wizard will create the account if it does not exist.

SSIS

The settings in this section relate to SQL Server Integration Services.

Screen Item	Description
SSIS configuration file environment variable	This field displays the environment variable for the SQL Server Integration Services package configuration. This is created on your computer to facilitate the ETL process.
SSIS package root folder	Enter the location to deploy the SSIS package. By default, the deployment wizard uses the *SQL Server* instance to determine the location. However, if you use a clustered SQL Server environment, you can enter a Universal Naming Convention path or another path. If you do not enter a custom path, the program uses the default SQL Server path.
SSIS package subfolder	This field displays the path to the SSIS package configuration file that contains the SQL statements for the ETL process.
SSIS SQL Agent Job Name	This field displays the SQL Agent job that the deployment wizard creates to run the ETL process.

Web Server Configuration

If you plan to deploy the OLAP cube with the Blackbaud Data Warehouse, you must configure your web servers to enable OLAP options in **Blackbaud CRM** such as the OLAP Explorer and the OLAP database roles tab on the Blackbaud Data Warehouse page. Keep in mind that if you have multiple web servers, you must configure them all for the OLAP cube.

Tip: If you don't plan to use the OLAP cube, you do not need to configure your web servers for OLAP. And when you deploy the data warehouse, you can set the **Deploy OLAP cube** setting on the Edit Advanced Data Warehouse Settings screen to "False" in order to improve the performance of the ETL process and remove the need for Analysis Server.

SQL Server 2012

SQL Server 2012 in compatibility mode 110 is supported for **Blackbaud CRM** versions 2.93 through 4.0.

Note: Compatibility mode 100 is not supported for **SQL Server 2012**.

- Install **SQL Server 2008** version of ADOMD.NET.
- Update the web.config file for binding redirect to access OLAP Explorer.

  Within the <runtime> and <assemblyBindings> tags near the beginning of the web.config files on your web servers, add the following information within <dependentAssembly> tags:

```
<dependentAssembly>
 <assemblyIdentity name="Microsoft.AnalysisServices.AdomdClient"
publicKeyToken="89845dcd8080cc91" />
 <bindingRedirect oldVersion="9.0.0.0-10.0.0.0" newVersion="11.0.0.0"
/>
</dependentAssembly>
<dependentAssembly>
 <assemblyIdentity name="Microsoft.AnalysisServices"
publicKeyToken="89845dcd8080cc91" />
 <bindingRedirect oldVersion="9.0.0.0-10.0.0.0" newVersion="11.0.0.0"
/>
</dependentAssembly>
```

- Install **SQL Server 2012**Analysis Management Objects for OLAP database roles.

SQL Server 2014

SQL Server 2014 in compatibility mode 110 is supported for **Blackbaud CRM** version 4.0.

> **Note:** Compatibility mode 100 is not supported for **SQL Server 2008**, and compatibility mode 120 is not recommended.

- Install **SQL Server 2014** version of ADOMD.NET.
- Update the web.config file for binding redirect to access OLAP Explorer. Copy the entry from the web.config file on the database server and place it into the web.config files on your web servers.

  Within the <runtime> and <assemblyBindings> tags near the beginning of the web.config files on your web servers, add the following information within <dependentAssembly> tags:

```
<dependentAssembly>
 <assemblyIdentity name="Microsoft.AnalysisServices.AdomdClient"
publicKeyToken="89845dcd8080cc91" />
 <bindingRedirect oldVersion="9.0.0.0-11.0.0.0" newVersion="12.0.0.0"
/>
</dependentAssembly>

<dependentAssembly>
 <assemblyIdentity name="Microsoft.AnalysisServices"
publicKeyToken="89845dcd8080cc91" />
 <bindingRedirect oldVersion="9.0.0.0-11.0.0.0" newVersion="12.0.0.0"
/>
</dependentAssembly>
```

- Install **SQL Server 2014** Analysis Management Objects for OLAP database roles.

Blackbaud NetCommunity Post-installation Tasks

After you install **Blackbaud NetCommunity**, review the following sections.

Confirm Status Complete

To confirm the installation was successful, check these items.

☐ From the **Start** menu, select **Programs**, **Blackbaud NetCommunity**, **TestConfig** to check the status of the application.

☐ From the **Start menu, select Programs**, **Blackbaud NetCommunity**, **Plug-in Service TestConfig** to check the status of your services.

NetCommunity Plug-in Options

Before you process transactions from **Blackbaud NetCommunity**, set the NetCommunity plug-in options. To do this, in **The Raiser's Edge**, click **NetCommunity** on the Raiser's Edge bar. When you click this for the first time after you install the plug-in, an overview and get started page appears. To access *Options*, click **Click here if you purchased NetCommunity and need to set it up** on the lower right corner of the page.

In *Options*, you must configure your web service URL address so you can download transactions from **Blackbaud NetCommunity** to **The Raiser's Edge**. For more information, see the *Blackbaud NetCommunity & The Raiser's Edge Integration Guide*.

> **Tip:** To return to *Options* the next time, you select **NetCommunity** on the Raiser's Edge bar. When the NetCommunity page appears, click **Options** on the top right corner of the page.

For information about how to install the NetCommunity plug-in, see .

Access Your Website

After you confirm **Blackbaud NetCommunity**'s status, use the default login and password—"Supervisor" and "admin" — to log in. Users with supervisor rights must use complex passwords, and the program prompts you to change the password. A complex password must contain at least eight characters, including at least one uppercase and lowercase letter, as well as at least one number or nonalphanumeric character such as "!," "@," and "#."

❯ Log in to your website

1. From the **Start** menu on your desktop, select **Programs**, **Blackbaud NetCommunity**, **Administrator's Home Page**. The login screen appears.

2. In the **Login** field, enter "Supervisor."

3. In the **Password** field, enter "admin."

4. Click **Login**. A message prompts you to change the password.

5. Enter a password that meets the complexity requirements.

   Users with supervisor rights must use complex passwords. A complex password must contain at least eight characters, including at least one uppercase and lowercase letter, as well as at least one number or nonalphanumeric character such as "!," "@," and "#."

6. Click **Login**. *Blackbaud NetCommunity* opens. You are now ready to work in the program.

Note: For information about how to change the user name and password, see the *Blackbaud NetCommunity* help file.

Configure the Installation

After you install *Blackbaud NetCommunity*, you must configure the installation to meet the needs of your organization. You can configure these settings in *Administration*. We recommend that only website administrators or those with supervisor rights in *Blackbaud NetCommunity* have access to *Administration*.

Merchant Accounts

To process credit card transactions, *Blackbaud NetCommunity* supports merchant accounts from multiple credit card processors, including Authorize.Net; BeanStream; International Automated Transactions Service (IATS), owned by Ticketmaster; Moneris; PayPal Payflow Pro; and Verus.

In *Merchant accounts*, you set up merchant accounts to process payments through parts and forms. On each part or form that processes payments, you select a merchant account.

Before you configure an account in *Merchant accounts*, you must set up an account with the credit card processor and receive the credentials necessary to access your account. When you configure the merchant account in *Merchant accounts*, you enter the credentials to allow *Blackbaud NetCommunity* to communicate your transactions to the credit card processor. Remember, the credit card processor provides you with their own merchant account numbers.

- To set up an account with Authorize.Net, complete the merchant inquiry form at http://www.authorize.net/solutions/merchantsolutions/merchantinquiryform/ or contact them by telephone toll-free at 1-866-437-0476. When you set up an account with Authorize.Net, you receive a vendor login ID and password. To configure a merchant account in *Blackbaud NetCommunity*, enter the ID and password in *Merchant accounts*.

- To set up an account with BeanStream, contact them by telephone at 250-472-2326 or fax at 250-472-2330. You must complete the application form at http://www.beanstream.com/public/merchant_accounts.asp to set up an account. When you set up an account with BeanStream, you receive a vendor merchant identification number. To configure a merchant account in *Blackbaud NetCommunity*, enter the identification number in *Merchant accounts*.

- To set up an account with IATS/Ticketmaster, contact them by telephone at 604-682-8455 or toll-free at 1-866-300-4287. You can also contact them by email at IATS@ticketmaster.ca or fax at 310-734-0794. Follow the steps listed at http://www.iats.ticketmaster.com/setupdocs/BBRE/bb.html to set up an account. When you set up an account with IATS/Ticketmaster, you receive a vendor login and password. To configure a merchant account in **Blackbaud NetCommunity**, enter the ID and password in *Merchant accounts*.

- To set up an account with Moneris, complete the online application form at https://www.moneris.com/index.php?context=/applynow or contact them by telephone toll-free at 1-866-666-3747 or by fax at 1-866-607-6665. When you set up an account with Moneris, you receive a store identification number and an API token. To configure a merchant account in **Blackbaud NetCommunity**, enter the identification number and API token in *Merchant accounts*.

- To set up an account with Payflow Pro/PayPal, follow the Get Started steps at https://www.paypal.com/cgi-bin/webscr?cmd=_payflow-get-started-outside or contact them by telephone toll free at 1-888-847-2747. When you set up a Payflow Pro account with PayPal, you receive a vendor login and password. To configure a merchant account in **Blackbaud NetCommunity**, enter the login and password in *Merchant accounts*.

- To set up an account with Verus Card Services/Sage Payment Solutions, contact them by telephone at 703-848-2980 or toll-free at 1-800-742-3975. You can also apply online at http://www.sagepayments.com or contact them by fax at 703-848-9457. When you set up an account with Verus, you receive a vendor login ID and password. To configure a merchant account in **Blackbaud NetCommunity**, enter the ID and password in *Merchant accounts*.

> **Note:** PayPal has acquired Verisign. If your organization has a Verisign account, PayPal may contact you to convert to a Payflow Pro account. When you convert to Payflow Pro, please contact **Blackbaud NetCommunity** Support to ensure the program continues to manage your credit card transactions smoothly.

For more information about *Merchant accounts*, see the *Administration Guide*.

Secured Sockets Layer (SSL)

Secure Sockets Layer (SSL) is a protocol to transmit private documents over the Internet. SSL uses a public key to encrypt data transferred over an SSL connection. Mozilla *Firefox*, Microsoft *Internet Explorer*, and other browsers support SSL. **Blackbaud NetCommunity** permits use of the protocol to safely transmit confidential information, such as credit card numbers and login information.

After you install **Blackbaud NetCommunity**, you can enable SSL to ensure sensitive data is secure over the Internet. To that end, it is important that you understand the steps necessary to set up SSL.

> **Note:** If Blackbaud hosts **The Raiser's Edge** and **Blackbaud NetCommunity** for you in a split-hosted environment or if you host the programs in separate geographic locations, you may want to encrypt traffic between the RE7Service Web Service and Blackbaud Hosted Web Services. To do this, the RE7Service requires SSL on the MasterService.asmx and CustomService.asmx files. For more information, visit www.blackbaud.com and access BB712622 in Knowledgebase.

Digital Certificates in Internet Information Server (IIS)

After you acquire a digital certificate, you can configure it on your **Blackbaud NetCommunity** web server in Internet Information Server (IIS). Follow the directions from Microsoft at http://support.microsoft.com/kb/228836/ to add your certificate to your web server. The digital certificate provides the public key that SSL needs to encrypt data. When Blackbaud hosts **Blackbaud NetCommunity**, the installation engineer assists in the process. For information about how to obtain a digital certificate, see the *Blackbaud NetCommunity System FAQs* document provided by Blackbaud Professional Services.

Digital certificates relate to only one root domain name, not an IP address or specific server. For example, you do not need to acquire a certificate for http://www.mydomain.com/netcommunity or http://www.mydomain.com/internetsolutions. Acquire only the certificate for www.mydomain.com instead. Additionally, when you configure your digital certificate on your default website, do not set the **Require secure channel (SSL)** option in IIS. This unnecessarily enables SSL across your entire website.

Configure SSL

Blackbaud Professional Services follows a series of procedures to install **Blackbaud NetCommunity**. If you request for Professional Services to enable SSL during your initial implementation, they use the following steps. If you do not request Professional Services's assistance, you can complete these on your own.

- After the installation, go to the Settings tab in *Sites* to select whether to require SSL on all web pages, administrative pages only, or pages with sensitive information only. For information about *Sites*, see Sites on page 73.

- In *IIS*, the SSLPage.aspx (in the **Blackbaud NetCommunity** virtual directory) is modified. This is the only instance security settings for the SSL certificate are set to **Require Secure Channel (SSL)**.

- If Blackbaud hosts **Blackbaud NetCommunity** and your web service is on your web server in the hosted environment, we recommend that it be secure. This requires a separate digital certificate on that web server for its domain. This is documented in your *Technical Requirements* document provided by Blackbaud Professional Services.

Additionally, when we host **Blackbaud NetCommunity**, we configure a digital certificate on the **Blackbaud NetCommunity** web server for your domain.

SSL on Your Website

By default, when you enable SSL in **Blackbaud NetCommunity**, only certain parts can use SSL. These parts include the Donation Form, Event Registration Form, Fundraiser, Formatted Text and Images (Secured), Membership Form, Personal Page Manager, and User Login parts. If you set the **RequiresSSL** field to "1" in the **ContentTypes** table in your **Blackbaud NetCommunity** database, you can add additional parts as secured.

To secure multiple pages on your website, add an empty Formatted Text and Images (Secured) part to any layout in **Blackbaud NetCommunity**. This way, any web page that uses the layout is automatically secured. For information about layouts, see the *Website Design Guide*.

When a website user is on a page that has a secured part, **Blackbaud NetCommunity** dynamically configures each image URL, URLs defined in parts, and document file URLs to "https." When a user navigates to any one page that contains an SSL part, the small lock appears on the browser. **Blackbaud NetCommunity** maintains this secured environment to the next page the user navigates to. It does not matter whether it has an SSL-enabled part. Any data transmitted from these secured pages is encrypted.

Additional SSL Information

To avoid mixing secure domains with nonsecure content, we recommend that you modify **Blackbaud NetCommunity** background URLs on Menu parts or in your custom CSS to "https://" (instead of "http://"). In addition, we recommend you modify any javascript URLs used in Formatted Text and Images parts to "https://."

In these situations, you can set URLs used to relative URLs. For example, for background images in your styles view.image?Id= 478 in the URL can be used in a style like this: background-image: url (view.image?Id= 478);. In this example, the URL references an image in *Images*. This is resolved to the correct domain during rendering, regardless of security.

We recommend that you sparingly use fixed URLs in styles and javascript because SSL retrieves the images every time it loads a fixed page. It does not matter whether the page is secure.

If you do not enable SSL on the administrative site, but you do enable the client site web pages, mixed mode messages and SSL redirect messages may appear when you switch between administration pages and your website pages.

If you plan to host objects, such as streaming media files or iFrames that reference files hosted elsewhere, consider the issue of combining secure and nonsecure content again. A nonsecure page in an iFrame on the same page as a secured **Blackbaud NetCommunity** web page is considered mixed content. In each instance, during the design of your site, we recommend you locate mixed areas of content together on the same **Blackbaud NetCommunity** web server or secured by its own digital certificate.

Field Options

In *Field options*, you can set default privacy settings for profile fields. Privacy settings determine which profile fields are visible to other members of the community. If a field is public, all website users can view it. If a field is private, only the individual site user can view it. To access *Field options* from *Administration*, click **Field options**.

Users can set privacy settings for their profile information in the Profile Display part. The user's settings override the default privacy settings in *Field options*. For example, Home Phone may be marked **Public By Default** in *Field options*, but users can make their phone numbers private on the Profile Display part.

For more information about *Field options*, see the *Administration Guide*.

Sites

In *Sites*, you can configure a variety of settings for your **Blackbaud NetCommunity** website. For example, you can enter your organization's name, select default web pages, and enter cache settings.

After you install **Blackbaud NetCommunity**, you must configure the following options on the Settings tab in *Sites*:

• Under **General**, enter the website address in the **Site URL** field. The program uses the site URL for outgoing email and links to web pages. You can also select a default time zone. If you do not select a default time zone, the program uses the date and time zone from the web server.

• Under **Pages**, select your home page and a privacy page that includes your privacy statement. Email from your website must include a link to the privacy page.

• Under **Registration and Login Options**, select whether to require complex passwords for website users. Complex passwords must contain at least eight characters, including at least one uppercase and one lowercase letter, as well as at least one number or nonalphanumeric character such as "!," "@," and "#." Users with supervisor rights must always use complex passwords.

Note: To help you comply with the Payment Card Industry Data Security Standard (PCI DSS), users with supervisor rights must change their passwords at least every 90 days. New passwords cannot match the four previous passwords.

• For *The Raiser's Edge*, under **The Raiser's Edge Options**, select the phone types in *The Raiser's Edge* to assign to downloaded telephone numbers, fax numbers, and email addresses. You can also configure other options such as the attributes that appear in website profiles.

• To help prevent automated abuse of your website, the program requires a completely automated public turing test to tell computers and humans apart (CAPTCHA). To use CAPTCHA, you must install reCAPTCHA and configure the installation. To obtain reCAPTCHA, go to http://recaptcha.net/. Under **reCAPTCHA**, enter your public and private keys for reCAPTCHA. The program uses CAPTCHA functionality to ensure users are not automated programs to generate spam or phish for payment information.

Note: Before you add parts with email or credit card processing functionality to your website, you must install reCAPTCHA. Until you enter the private and public keys for reCAPTCHA, a warning message appears on these part. Without CAPTCHA, you leave the website vulnerable to automated abuse.

For more information, see the *Administration Guide*.

Web.config File Settings

In the web.config file, you can adjust options related to your website and its overall performance, including settings for custom error pages, the maximum file upload size, and the website timeout.

Custom Error Page Settings

By default, remote users view custom error pages, when specified, and local users view only ASP.NET error pages, which contain rich error information that provides a stack trace. To specify the error pages remote and local users view, you can adjust the `<customErrors mode=/>` key of the web.config file.

• To display custom error pages for all remote users and ASP.NET error pages for local users, set the key to <customErrors mode="RemoteOnly"/>. By default, the key is configured to this setting when you first install **Blackbaud NetCommunity**.

- To display custom error pages for all users, set the key to `<customErrors mode="On"/>`. All users view custom error pages, unless one is not specified. If a custom error page is not specified, the ASP.NET error page appears and describes how to view errors remotely.

- To display only ASP.NET error pages for all users, set the key to `<customErrors mode="Off"/>`. All users view ASP.NET error pages, which contain rich error information.

Maximum File Upload Size and Website Timeout Settings

By default, the maximum file upload size setting is 4 MB (4096 KB). This is applicable for an HTTP Runtime request, such as a Fundraiser Synchronize or a Directory search, or an uploaded document, such as for the Document part or an imported email list. To increase this setting, you can adjust the web.config file.

In the system.web section, add or adjust the `maxRequestLength` key in the `<httpRuntime>` element. To increase the maximum number of seconds a request can execute, such as for very large files, you can also adjust the `executionTimeout` key. If you receive an HTTP Runtime error in the event log, increase these settings until you no longer receive the error. For example, to increase the maximum file upload size to 16384 KB and the timeout setting to 1 hour (3600 seconds), adjust the keys in the `system.web` section to `<httpRuntime useFullyQualifiedRedirectUrl="true" executionTimeout="3600" maxRequestLength="16384"/>`.

> **Note:** We recommend you review the Microsoft Knowledgebase article at http://support.microsoft.com/?id=295626 before you maximize the file size or website timeout settings.

Session Cookie Security Settings

To secure the cookies created by the program for each session, such as to prevent abuse by malicious users, you can add a key to the web.config file. When you add this key, you enter an attribute to encrypt the cookies generated by the program. For security, we recommend the attribute entered be a random string of around 50 characters. In the `<appSettings>` element of the ~~configuration~~ section, enter `<add key="SessionBinderKey" value="[attribute]"/>`, where `[attribute]` is the random character string used to encrypt the cookies.

NetCommunityService.exe.config File Settings

With the NetCommunityService.exe.config file, you can adjust the maximum number of records that download to **Raiser's Edge** at one time. By default, up to 500 records download to **Raiser's Edge** during a routine download. To increase this setting, such as for the demands of web traffic, you can adjust the NetCommunityService.exe.config file.

- To increase the maximum number of records that download to **Raiser's Edge** at one time, adjust the <add key="REIntegration_MaxRecords" value="500"/> key, where "500" is the number of records to download.

- To increase the maximum number of constituents and website users that download to **Raiser's Edge** at one time, adjust the <add key="REIntegration_MaxRecords_ClientUsers" value="500"/> key, where "500" is the number of records to download.

- To increase the maximum number of personal page records that download to **Raiser's Edge** at one time, adjust the <add key="REIntegration_MaxRecords_PersonalPages" value="500"/> key, where "500" is the number of records to download.

- To increase the maximum number of email information records that download to **Raiser's Edge** at one time, adjust the <add key="REIntegration_MaxRecords_EmailInfo" value="500"/> key, where "500" is the number of records to download.

- To increase the maximum number of email recipients that download to **Raiser's Edge** at one time, adjust the <add key="REIntegration_MaxRecords_EmailRecipients" value="500"/> key, where "500" is the number of records to download.

- To increase the maximum number of newsletter records that download to **Raiser's Edge** at one time, adjust the <add key="REIntegration_MaxRecords_Newsletters" value="500"/> key, where "500" is the number of records to download.

- To increase the maximum number of web traffic records that download to **Raiser's Edge** at one time, adjust the <add key="REIntegration_MaxRecords_WebTraffic" value="500"/> key, where "500" is the number of records to download.

- To increase the maximum number of Fundraiser email information records that download to **Raiser's Edge** at one time, adjust the <add key="REIntegration_MaxRecords_FREmailsInfo" value="500"/> key, where "500" is the number of records to download.

- To increase the maximum number of Fundraiser comments information records that download to **Raiser's Edge** at one time, adjust the <add key="REIntegration_MaxRecords_FRCommentsInfo" value="500"/> key, where "500" is the number of records to download.

Troubleshoot Errors on Your Blackbaud Website

If errors occur when you access **Blackbaud NetCommunity** after an installation or upgrade, please review this section.

Install Blackbaud Core Components

The first time you use the Infinity Installer to install or upgrade your Blackbaud products, you must install the Blackbaud Core Components on a web server. This feature includes the services required by your Blackbaud online applications. If you do install the Blackbaud Core Components when you first run the Infinity Installer, or if an interruption occurs before the feature is installed, you will receive an error message when you access **Blackbaud NetCommunity**. Follow the steps in Repair or uninstall features on page 44 to install Blackbaud Core Components.

Update Version Settings

When you install or upgrade **Blackbaud NetCommunity** and **The Raiser's Edge** web service, the application version numbers in the **Blackbaud CRM** web.config file do not automatically update. If the version numbers do not match, an error may appear on the configuration test page. You must enter the correct version numbers after each installation or upgrade.

From the web.config file in the \bbappfx\vroot\BBNCSvc folder, you can enter the correct version numbers. In the `appSettings` section of the web.config file, add keys to define the full version

number for ***Blackbaud NetCommunity*** and ***The Raiser's Edge*** web service. Follow the format "major.minor.build.patch" to enter this value.

☐ To configure the ***Blackbaud NetCommunity*** version number, enter `<add key="BBNC_ VERSION" value="[attribute]"/>`, where `[attribute]` is the full version number.

☐ To configure ***The Raiser's Edge*** web service version, enter `<add key="RE7API_VERSION" value="[attribute]"/>`, where `[attribute]` is your current version of ***The Raiser's Edge***.

Troubleshooting

This chapter addresses issues you may encounter after you complete the installation or upgrade process.

Update Application Pool Users

If you install **Blackbaud NetCommunity**, the program adds the account you select on the Application User screen in the Blackbaud Installer as an application user with system administrator rights in **Blackbaud CRM**. If you later run the **Blackbaud NetCommunity** application pool as a different user, you must grant system administrator rights to the application user you select. In addition, if you run the NetCommunity Service as a different user, you must also grant system administrator rights to **Blackbaud CRM** for this user. For information about how to add an application user and grant system administrator rights, see the Blackbaud CRM *Administration Guide*.

Unreachable Landing Page

After upgrading, or installing **Blackbaud CRM** to a virtual directory in 2.91 or higher, the landing page is unreachable due to a HTTP 500 Error. This installation is made under a root website in which an existing **Blackbaud NetCommunity** installation has not been upgraded to the latest version. This may also happen under other applications at the root level in which the root website is set to use an Application Pool that is set to use a .NET Framework version that is earlier than v4.0.

Reason for breaking

Microsoft has made changes to ASP.NET version 4.0 in which new sections have been added to the machine's web.config that now conflict with existing installations of **Blackbaud NetCommunity**. The application at the virtual directory level inherits some of its configuration options from its parent, a .NET Framework 2.0 application, causing a duplicate configuration section.

Solution

There are three options that should be considered before altering with web.config files

Option 1: Upgrade the application at the root website node to **Blackbaud CRM** version 2.91 or higher.

Option 2: Uninstall the root node instance and reinstall as a virtual directory of the root website node.

Option 3: Create a new website to install **Blackbaud CRM**.

If none of these options can be followed, the following steps have been provided. Please note that by following these steps you are altering files shipped by Microsoft.

Follow the instructions at the following link:

http://www.asp.net/learn/whitepapers/aspnet4/breaking-changes#0.1__Toc256770150

Step 1 should suffice for most users that fall under using a non-upgraded **Blackbaud NetCommunity** installation.

Essentially, move the "system.web.extensions" <sectionGroup> node under the <configSections> node in the root website web.config file to the machine level web.config file existing at either

C:\Windows\Microsoft.NET\Framework\v4.0.30319\CONFIG\web.config

Or

C:\Windows\Microsoft.NET\Framework64\v4.0.30319\CONFIG\web.config

This step must be followed by all existing pre-2.91 installations that will not be upgraded.

In the same root website web.config, ensure that the inheritInChildApplications attribute is set to false for the location tag wrapping the configuration entries.

Other Helpful Information

You can access the latest user guides and Knowledgebase solutions at support.blackbaud.com or go to www.blackbaud.com and select **Support** from the menu bar.

Blackbaud NetCommunity Online Help File

The **Blackbaud NetCommunity** help file is your primary source for information about the program. To access the help file after you install the program, click **Help** at the top of the screen. You can also click **Help** on the home page.

To provide the latest information, the help file is constantly updated. The help file contains Contents, Index, and Search tabs.

The help file demonstrates key concepts of **Blackbaud NetCommunity** in different ways. In addition to conceptual information and procedural tasks, diagrams provide a visual to help you understand **Blackbaud NetCommunity**. This is an example of a diagram contained in the help file:
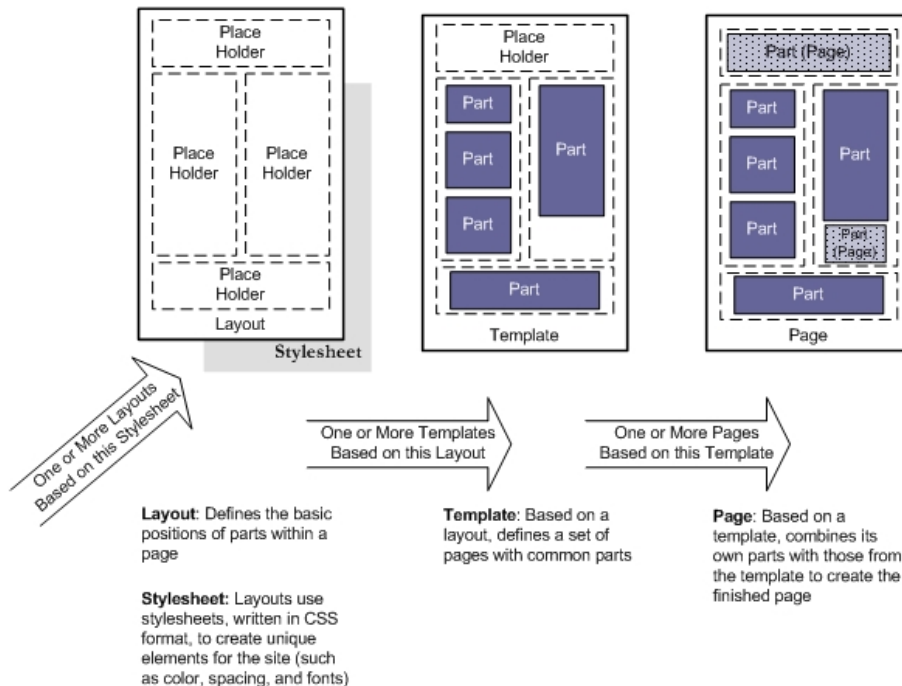
Help Specific to the Current Screen

Throughout the program, look for additional buttons on screens to access help for that specific screen. For example, in *Parts*, click **Help** on the action bar to see descriptions of each part type.

Print Version

You can access the latest user guides on the Blackbaud website, www.blackbaud.com. Select **How-to Documentation** from our website's **Support** menu.